

Saxony, regency of Magdeburg, and circle of Oschersleben, 5 m. WNW of Halberstadt. Pop. 700.

STROBITZI, a town of Greece, in the Morea, 35 m. WSW of Tripolitza, and 6 m. from the gulf of Arcadia.

STROBNITZ, a town of Bohemia, in the circle and 21 m. SE of Budweis, on the L. bank of a small river of the same name. Pop. 530.

STROEMEN-FIORDEN, a gulf of Norway, in the dio. and bail. of Nordland, in N lat. 68° E long. 14° 50'. It opens into the North sea, on the W, by three channels formed by the islands of Stegen and Lundland, and is 24 m. in depth, and 12 m. in breadth. It presents a very irregular outline, and contains several islands, of which Cartsoe is the principal. Several narrow peninsulas separate it from the W. Fiorden on the N; from the Tys-fiord on the E; from the Nordfolden on the S; and on the N from the Hammeroe.

STROEMMEN, a town of Norway, in the dio. of Aggershuus, and co. of Jarlsberg, 9 m. SSE of Stroemsoe, on the W bank of the Drammen-fiord.

STROEMOE, an island of the Atlantic, in the group of the Faroe islands, in N lat. 62° 10', W long. 11° 50'. It is the largest of the group, and lies between the islands of Osteroe on the E; that of Sandoe on the S; and Vaargoe on the W; and is separated from them by narrow channels filled with shoals, and washed by rapid currents, which render the navigation difficult. It is 39 m. in length from NNW to SSE, and 15 m. in breadth, and presents numerous arms, of which the principal are the Kaldefiord, the gulf of Kalbach, and bay of Thors-havn. Its shores are bordered with mountains, some of which rise abruptly to the height of 2,200 ft. above sea-level. The climate is inclement, and the soil rocky, but it affords excellent pasturage, and yields also considerable quantities of barley, rye, and legumes. Thors-havn, the only town in the group, is its chief place.

STROEMSDAL, a mining village of Sweden, in the prefecture of Stora-Kopparberg, in the Wester Dalerne and parish of Soefsen, 48 m. SW of Falem.

STROEMSOE, a town of Norway, in the dio. of Aggershuus and co. of Jarlsberg, 24 m. SW of Christiania, on the r. bank of the Drammen-elv, at its confluence with the Drammen-fiord, opposite Bragernaes, with which it is connected by a draw-bridge. Pop. 5,420. It is open and well-built, and has a cathedral, two other churches, and several elementary schools. It has manufactories of tobacco, sail-cloth, and several tanneries; and possesses an excellent harbour, commodious quays, and fine maritime magazines. Its trade consists chiefly in fish, the produce of the adjacent waters, and timber.

STROEMSTAD, a town and port of Sweden, in the prefecture of Goeteborg and Bohus, and haerad of Waette, 72 m. SSE of Christiania, on the E side of the Skager-Rack, in a mountainous locality. It has a good port and productive fisheries.

STROKESTOWN, a market and post town, partly in the p. of Kiltristan, but chiefly in that of Bumlín, co. Roscommon, 5½ m. SSE of Elphin. The streets, as to edifying, are superior to those of most other Connaught towns. Pop. in 1851, 1,353.

STROMA, an island in the Pentland frith, politically included in the p. of Canisbay, Caithness-shire. It lies opposite Gill's-bay, 1½ m. distant from the continent. It forms an oval of 2½ m. by 1½ m., the longer axis extending from NE to SW.

STROMAY, an Hebridean island, 1½ m. long, and a ½ m. broad, separated by a narrow strait from the N end of North Uist, and flanking the E side of Loch-Mhicfail.

STROMBEEK, a commune of Belgium, in the

prov. of Brabant, and dep. of Strombeek-Bever, Pop. 572.

STROMBEEK-BEVER, a department and commune of Belgium, in the prov. of Brabant, watered by a small stream, named the Molebeek. Pop. 737.

STROMBERG, a town of Prussia, in the prov. of the Rhine, regency and 31 m. SSE of Coblenz and circle of Kreutznach, on the Guttenbach. Pop. 1,036. It has two churches, a Catholic and a Reformed, and contains a paper-mill, and several tanneries. In the vicinity are quarries of marble.—Also a town in the prov. of Westphalia, regency and 27 m. SE of Munster, and circle of Beckum, on a mountain. Pop. 368.

STROMBOLI, an island of the Mediterranean, in the group of the Lipari islands, of which it is the most northerly, 11 m. NE of the island of Panaria. It is about 10 m. in circuit, and rises abruptly out of the sea in a steep conical form, abrupt and sharp-pointed, "looking from a distance too steep to be habitable. On the E side, however, the precipitous declivity is somewhat easier. Here a few fishermen's huts, composed of black lumps of lava and other volcanic productions, and covered with coarse mats, stand upon the shore; higher up is the pleasant village of Santo-Bartolomeo, with its church shrouded in vineyards and mulberry plantations. The pop. of the island amounts to 2,000. The island produces delicious Malmsey, which rivals the Syracusan wine in strength and sweetness. Considerable quantities of grapes are dried, which are known to commerce as *passola* and *passolina*, or large and small raisins." The volcano is constantly active. Mr. Woodhouse thus describes its appearance: "At length we were round the last point, and beheld a spectacle unique in its kind, close to us. From the dark gulph, at intervals of about two minutes, arose a splendid sheaf of fire, which opened on high like a fan, and then rattled down the mountain sides like a rain of burning stones; a large part of the mass evidently fell back into the crater; but much was hurled forth, reached the sea at a mighty bound, and was therein quenched, hissing like molten lead. The smaller masses remained lying on the edge of the abyss, immediately covered by new layers. This restlessly continuous eruption has filled up all the gullies and hollows upon the mountain side, and an uniformly level slope, of ashes and blocks of lava, descends from the crater to the sea. But as the greater number of fragments nevertheless remain close to the crater, a large mass of stones quickly accumulates, occasioning from time to time an avalanche which hurries with a thundering noise into the sea. If the moment of ejection was that of the more striking effect, when its lightnings riddled all the adjacent rocky crags, the tranquil intervals were scarcely less majestic." No violent eruption of this volcano has occurred within the last 2,000 years.

STROMNESS, a parish in the SW corner of Pomona, Orkney. Its greatest length, from N to S, is about 5½ m.; its greatest breadth is about 3½ m.; superficial extent about 14 sq. m. Pop. in 1831, 2,944; in 1851, 2,770.

STROMNESS—originally CRESTON—a burgh-of-barony, and a considerable town and port, on the S coast of the cognominal parish, is 14 m. W by S of Kirkwall, and 29 m. NNE of Thurso. It occupies the sloping skirts of high ground along the W side of a fine bay. The principal street is nowhere wider than 12 ft. The houses between it and the bay are, in numerous instances, built within high-water mark, and provided with tiny bulwarks, quays, and jetties. The bay or natural harbour extends upwards of 1 m. from S to N. It is entered

by a passage a  $\frac{1}{2}$  m. wide, but expands in the interior to a width of a  $\frac{1}{2}$  m. It has a firm clay bottom, and sufficient depth of water for vessels of 1,000 tons burden, and is sheltered from the violence of every wind. The pier has 18 ft. of water in spring tides. A considerable number of vessels belong to the port; and many boats are employed in the local fisheries. Boat and ship-building is carried on to a noticeable extent; and the making of straw-plait employs a large number of females.

**STROMSTADT**, a town of Sweden, in the län and 110 m. from Göteborg, on a peninsula of the Baltic. Pop. 1,502. It has a harbour and important fisheries.

**STRONA**, a village of Sardinia, in the dio. of Turin, prov. and 7 m. NE of Biella and mande. of Cossato, at the foot of a hill, on the l. bank of a small river of the same name, an affluent of the Carvo. Pop. 1,020.

**STRONG**, a township of Franklin co., in the state of Maine, U. S., 48 m. NW by N of Augusta. It is hilly in the S, and is watered by Sandy river, the banks of which are extremely fertile. Pop. in 1840, 1,109; in 1850, 1,008.

**STRONGOLI**, a town of Naples, in the prov. of Calabria-Ultra, district and 14 m. NNW of Cotrone, on a steep rock, 3 m. from the shore of the Ionian sea. Pop. 2,000. It has a cathedral, four convents, a school, an hospital, and two alms-houses.

**STRONGSVILLE**, a township of Cuyahoga co., in the state of Ohio, U. S., 14 m. SSW of Cleveland, and watered by the E branch of Rocky river. Pop. in 1840, 1,151; in 1850, 1,199.

**STRONGYLO**, a small island of the Archipelago, in the Cyclades, to the SW of the island of Spotiko, and to the E of that of Sophanto, in N lat.  $36^{\circ} 56'$ , and E long.  $24^{\circ} 58'$ .

**STRONSAY**, an island in Orkney,  $2\frac{1}{2}$  m. S of Spurness in Sanday, and  $6\frac{1}{2}$  m. NNE of Moul-head in Pomona. It is so deeply and continuously indented by bays as to consist of three large connected peninsulæ, two of which are subdivided into smaller peninsulæ; and it is winged at brief distances by 6 or 7 pasture-islets or holms. Its greatest length from NW to SE is  $7\frac{1}{2}$  m.; its greatest breadth  $6\frac{1}{2}$  m.; and its superficial extent, including the holms, is about 14 sq. m. No part of the interior is more than a mile from the sea. The commodious and safe roadstead of Ling-sound on the W, is sheltered from W winds by the islet of Meikle Ling, and from all other winds by the coast or headlands of Stronsay; and the roadstead of Papa-sound on the NE, is completely landlocked and thoroughly sheltered, but has entrances the one of which is intricate, and the other narrow and dangerous. The Stronsay frith is simply the open sound which washes S. on the E, and Eday and Shapinsay on the W. In the NE stands the village of PAPA-SOUND: which see. Pop. in 1837, 1,207; in 1851, 1,176.

**STRONSAY-AND-EDAY**, a parish in the Orkney islands, comprehending the islands of STRONSAY, EDAY, PAPA-STRONSAY, and FARAY: which see; and nine holms or pasture isles. Its greatest length is 17 m.; its greatest breadth is about 8 m.; and its area, exclusive of intersecting seas, is about 26 sq. m. Pop. in 1831, 1,827; in 1851, 2,227.

**STRONTIAN**, a district in the N of Argyleshire, in the parishes of Ardnamurchan and Morven. Its length is 25 m.; its breadth 10 m. Its inhabitants are chiefly small crofters, miners, shepherds, farm-servants, and a few handicraftsmen, who for the most part reside in the valley of S. The country is wild and uninteresting, though there is grandeur in one scene, in a deep valley which is terminated by

the fine form of Scur-Donald. A chief feature is LOCH-SUNART: which see. Pop. in 1836, 1,200. The village of S. stands at the foot of its cognominal valley, on the N side of Loch-Sunart,  $1\frac{1}{2}$  m. from the head of that loch, and 21 m. ENE of Tobermory. There are lead-mines situated between 2 and 3 m. up the valley, and N of the village. The mineralogy of this district embraces a great variety of the most rare calcareous spars, with splendid specimens of the staurolite; and it revealed, for the first time to naturalists, the carbonate of strontian, or rather the peculiar elementary earth itself to which the locality has given name.

**STROOBRUGGE**, a commune of Belgium, in the prov. of E. Flanders, and dep. of Maldegheem. Pop. 273.

**STROOKOT**, a commune of Belgium, in the prov. of W. Flanders, and dep. of Ruysselede. Pop. 1,586.

**STROOMSTRAET**, a commune of Belgium, in the prov. of E. Flanders, and dep. of Oost-Eecloo. Pop. 294.

**STROOYBOOME**, a commune of Belgium, in the prov. of W. Flanders, and dep. of Moorslede. Pop. 400.

**STROPPE**, a village of Prussia, in the prov. of Silesia, regency and 23 m. NNW of Breslau, and circle of Trebnitz. Pop. 655. It has an hospital, and possesses manufactories of cloth.

**STROPPIANO**, a village of Sardinia, capital of a mandemento, in the prov. and 20 m. SSW of Novara, and prov. of Vercelli. Pop. 2,000.

**STROPPO**, a village of Sardinia, in the div. and prov. and 21 m. WNW of Coni, and mand. of St. Damien-de-Coni, at the foot of mountains, on the bank of the Maira. Pop. 1,020.

**STROTHER**, a village of the principality of Waldeck, in the bail. of Eder. There are mines of copper, lead, and iron in the vicinity.

**STROUD**, a parish and parl. borough in the hund. of Bisley, co. of Gloucester, 9 m. SSE of Gloucester, and 27 m. NE of Bristol, in the line of the Great Western railway, and the Thames and Severn canal. Area of p. 3,810 acres. Pop. in 1801, 5,422; in 1831, 8,607; in 1851, 8,798. The town stands upon an eminence near the confluence of the Frome and the Slade. It has long been the centre of the woollen manufacture in Gloucester, and owes its superiority to the water of the Frome or Stroud, which is said to have a peculiar property for fixing scarlet and other grain colours. The banks of the river are, in consequence, covered with dyeing establishments, fulling-mills, &c. The reform act has conferred the privilege of returning 2 members to parliament on this town, in conjunction with the several parishes of Stroud, Bisley, Painswick, Pitchcomb, Randwick, Stonehouse, Leonard-Stanley, King's-Stanley, Rodborough, Minchinhampton, Woodchester, Avening, and Horsley, except that part of the parish of Leonard-Stanley which is called Lorridge's Farm, and is surrounded by the p. of Berkley. Pop. of parl. borough in 1851, 36,535. Registered electors in 1852, 1,328. S. is a polling-place in the election of members for the E division of the county.

**STROUD**, a village of New South Wales, in the co. of Gloucester, on the E bank of the Karuah, about 7 m. from Bourral. It is the head-quarters of the Australian Agricultural company.—Also a river in the same co., an affluent of the Karuah.

**STROUD**, a township of Monroe co., in the state of Pennsylvania, U. S. It is in some parts hilly, and is watered by Smithfield and Cherry creeks. Pop. in 1840, 1,206.

**STROUD**, or STROOD (EXTRA and INFRA), a par-



ish in Kent, about 1 m. NW of Rochester, on the W bank of the Medway. Area 1,622 acres. Pop. 3,067.

**STROUDSBURG**, a town of Stroud township, Monroe co., in the state of Pennsylvania, U. S., on the N bank of Smithfield creek, 98 m. NE of Harrisburg. Pop. in 1840, 407; in 1850, 841.

**STROUGA**, or **OUSTOURGA**, a town of Turkey in Europe, in Albania, in the sanj. and 6 m. WNW of Ochrida, on the l. bank of the Black Drin. Pop. 750. It carries on an active trade in salted trout, the produce of Lake Ochrida.

**STROUMA**. See **KARA-SU**.

**STROXTON**, a parish in Lincoln,  $3\frac{1}{2}$  m. SSW of Grantham. Area 970 acres. Pop. in 1851, 112.

**STRUBBY-WITH-WOODTHORPE**, a parish in Lincolnshire, 4 m. N of Alford. Area 2,075 acres. Pop. in 1831, 201; in 1851, 287.

**STRUBEL (WILDE)**, a mountain of Switzerland, in the cant. of Berne, and bail. of Ober-Simmenthal. It has an alt. of 9,694 Parisian ft. above sea-level.

**STRUCKHAUSEN**, a parish of the duchy of Oldenburg, circle and 3 m. WSW of Ovelgonne, bail. and 5 m. W of Brake, in a marshy locality. Pop. 2,800.

**STRUDA**, a town of the kingdom of Naples, in the prov. of the Terra-d'Otranto, district and 7 m. E of Lecce and cant. of Vernole, in a wide plain. Pop. 680.

**STRUDEN**, a town of Austria, in the country above the Ens, and circle of the Muhl, 27 m. SE of Freystadt, on the Danube. It contains the castle of Werftenstein.

**STRUEL**, a townland, remarkable for its reputedly holy wells, in the p. of Downpatrick,  $1\frac{1}{2}$  m. ESE of the town of Downpatrick, co. Down. The wells, which are named sometimes after St. Patrick, but more frequently after the townland on which they are situated, on Midsummer Eve, and the Friday before Lammas, are the resort of numbers of the Roman Catholic peasantry,—some in quest of health, and others to perform penances. They are four in number, and communicate with one another by subterraneous channels.

**STRUEL**, or **STRULE**, a river of co. Tyrone, formed by the confluence of the Camowen and the Fairy-water, at a point  $1\frac{1}{2}$  m. NW of Omagh. It flows to a confluence with the Derg, and the formation of the Mourne.

**STRUMPFELBRUNN**, a village of the grand-duchy of Baden, in the circle of the Lower Rhine, in the Odenwald, to the E of Eberbach. Pop. 600. It has manufactories of cloth.

**STRUMPSHAW**, a parish in Norfolk, 7 m. E by S of Norwich, crossed by the Norwich and Yarmouth railway. Area 1,337 acres. Pop. 441.

**STRUNKOWITZ**, a town of Austria, in Bohemia, in the circle of Frachin, 21 m. WNW of Budweis, on the l. bank of the Blanitz. Pop. 881.

**STRUPPEN**, a village of Saxony, in the circle of Meissen, bail. and 4 m. SE of Pirna, in a valley, on a small affluent of the Elbe. Pop. 530.

**STRUSOW**, a town of Galicia, in the circle and 17 m. S of Tarnopol, in a woody valley on the Sered.

**STRUTH**, a village of the duchy of Nassau, in the bail. and 9 m. ENE of St. Goarshausen, on the Sulzbach. Pop. 230. It has a tile-work. In the vicinity, to the NNW, are the ruins of the ancient convent of Schonau.

**STRUYKT**, a commune of Belgium, in the prov. of Brabant, and dep. of Caggevinne-Assent. Pop. 180.

**STRY**, a river of Austria, in Galicia, which descends from the N side of the Carpathian mountains, at the SW extremity of the circle of the same name, and on the confines of Hungary; runs NW; enters the circle of Sambor; makes several windings; re-

enters the circle of its own name; turns NE; divides into numerous arms, which reunite at the town of Stry; and after a total course of about 138 m., joins the Dniester, 6 m. ENE of Zydaczow. Its banks towards the lower part of its course are very marshy.—Also a circle and town in the same prov., and in the gov. of Lemberg. The circle is bounded by the circles of Brzezany on the N and NE; of Stanislawow on the E and SE; and of Sambor on the W; and on the S by Hungary, from which it is separated by the Carpathians. It contains 12 towns and 277 villages. Pop. in 1837, 217,916; in 1843, 235,737. With the exception of some level tracts in the NE and SW, its entire surface is covered with woody mountains. It is watered in the N part by the Dniester, and by its affluents the Stry, Siwka, and Lomica. The valleys possess considerable fertility, but agriculture is much neglected, and, with the exception of apples and flax, have few productions. It contains numerous salt-works and forges. The town is 45 m. S of Lemberg, near the l. bank of the Stry. Pop. 6,491. It is enclosed by walls and ditches, and has a castle, two churches, a Catholic and a United Greek, and a school.

**STRYEN**, a village of Holland, in the prov. of S. Holland, arrond. and 8 m. SW of Dordrecht, in the island of Beyercand, on a stream, which, a little below, flows into the Hollands-diep. Pop. 1,950.

**STRYKERSVILLE**, a village of Wyoming co., in the state of New York, U. S., on Buffalo creek, 244 m. W of Albany. Pop. in 1850, 250.

**STRYKOW**, a town of Poland, in the gov. of Masowie, obwod and 30 m. WNW of Rawa, on an affluent of the Bzura. Pop. 1,200, of whom 760 are Jews. It has manufactories of cloth, and of hats.

**STRYMEESCH**, a commune of Belgium, in the prov. of E. Flanders and dep. of Vlierzell. Pop. 373.

**STRYMON**. See **KARA-SU**.

**STRYPEN**, a department and commune of Belgium, in the prov. of E. Flanders and arrond. of Audenarde. Pop. 1,448.

**STRYTHER**, a department and commune of Belgium, in the prov. of Brabant and arrond. of Brussels. Pop. 549.

**STRZELA**, a river of Austria, in Bohemia, which has its source in the NW part of the circle of Pilsen, a little to the SW of Teyfing; runs first NE, then E; traverses the SE part of the circle of Elnbogen; passes Luditz and Chisch; re-enters the circle of Pilsen; encircles Rabenstein; and, bending ENE, joins the Beraunka on the l. bank, 5 m. NW of Radnitz, and after a sinuous course of about 42 m.

**STRZELECKI**, a range of mountains in Australia Felix, in the district of Western Port, and to the S of the Great Swamp.

**STRZELEWO**, a village of Prussia, in the prov. of Posen, to the E of Nakel. Pop. 250.

**STRZELISKA-NOWA**, a town of Galicia, in the circle and 24 m. WNW of Brzezany, on a height.

**STRZELLNO**, a town of Prussia, in the prov. of Posen, regency of Bromberg, circle and 12 m. SSW of Inowracław. Pop. 1,600. It has a suburb. The environs are extremely fertile.

**STRZEMILCZE**, a town of Galicia, in the circle and 36 m. NNE of Zloczow, near the Russian frontier, in a marshy locality, on the l. bank of the Styr.

**STRZIBRO**. See **MIES**.

**STRZUMILOWA**. See **KAMIOWKA-STRZUMILOWA**.

**STRZYSZOW**, a town of Austria, in Galicia, in the circle and 18 m. NE of Jaslo, on the l. bank of the Wislok. It has manufactories of cotton fabrics.

**STUART**, or **STEWART POINT**, a headland of New Zealand, at the SE extremity of New Leinster, S of Stewart island, to the E of South Cape.

**STUART**, or **STEWART SOUND**, a channel of the

Indian ocean, running between North and Middle Andaman islands.

**STUART**, or **STEWART ISLAND**. See article New Zealand, page 558.

**STUART'S LAKE**, a lake of British North America, in New Caledonia, about 105 m. in circuit. Its central part is in N lat.  $54^{\circ} 50'$ , W long.  $124^{\circ} 40'$ . It is named by the Aborigines, Nuckaws-cay. The surrounding country is woody, and contains several lakes of smaller extent. On its banks is a fort originally belonging to the North-west trading company. Its waters abound with salmon.

**STUBBEKJOBING**, or **STUBBENKJOBING**, a town of Denmark, in the stift of Laaland, bail. and 26 m. ENE of Mariébøe, on the NE coast of the island of Falstoe, opposite that of Baagbøe, and on the Grøn-Sund. Pop. 700. It is enclosed by walls, and has four gates, a church, and a Danish school. It has manufactories of pipes and of gloves. Its port is small, but carries on a considerable trade in grain.

**STUBBENKAMMER**, a headland of Prussia, in the prov. of Pomerania, on the NE coast of the island of Rugen.

**STUBEN (ALT)** or **UNTER-STUBEN**, **DOLNJ-SSTUBNA**, or **STUBNA**, a village of Hungary, in the comitat of Thurótz, 5 m. SSW of Mosocz, near the l. bank of the Stubna, an affluent of the Thurótz. It has thermal baths.

**STUBENBACH**, a village of Austria, in the circle of Prachin, 21 m. S of Klattau, in a valley of the Böhmerwald, on a torrent. It has two glass-works.

**STUBERSHEIM**, a village of Württemberg, in the circle of the Danube, bail. and 5 m. SE of Geislingen. Pop. 290.

**STUBEY (VAL)**, a picturesque valley of the Tyrol, in the SW part of the circle of the lower Innthal, 6 m. S of Innsbruck, and at the foot of mount Schönberg. It is traversed by the torrent of Ruzbach, and is about 21 m. in length, and with the lateral valleys comprises an area of 45 sq. m. Pop. 3,747. It has manufactories of iron-ware, cutlery, and nails. Its principal village is Neustift.

**STUBTON**, a parish in Lincolnshire, 6 m. ESE of Newark. Area 860 acres. Pop. in 1851, 186.

**STUCKENBROEK**, a village of Prussia, in the prov. of Westphalia, regency and 29 m. SSW of Minden, and circle of Paderborn, near the Teutoburgerwald, on the Knochenbach. Pop. 1,700. It has a paper, and several flax and oil-mills, and tile-kilns.

**STUDEIN**, a town of Moravia, in the circle and 20 m. SW of Iglau, on an island of the Felixbach, a small affluent of the Taya.

**STUDENITZ**, a market-town of Austria, in Styria, in the circle and 18 m. ENE of Cilly, near the r. bank of the Drän. Pop. 300. It has a castle, and a priory founded in 1,263.

**STUDHAM**, a parish partly in Herts, but chiefly in Bedfordshire, 33 m. S by W of Dunstable, including the hamlets of Humbershoe, S., and part of St. Market. Area 3,100 acres. Pop. in 1851, 809.

**STUDIENNA**, **STUDENA**, or **STUDZIENNA**, a village of Prussia, in the prov. of Silesia, regency and 45 m. SSE of Oppeln, and circle of Ratibor, on a small affluent of the Oder. Pop. 375.

**STUDLAND**, a parish in Dorset, 5 m. E by N of Corfe-castle. Area 7,814 acres. Pop. in 1801, 332; in 1831, 435; in 1851, 445. S. bay, though an open roadstead, affords excellent anchorage for ships drawing 14 or 15 ft. of water.

**STUDLEY**, a parish in Warwickshire, 4 m. N by W of Alcester, watered by the river Arrow. Area 4,262 acres. Pop. in 1851, 2,183.

**STUDLEY-WITH-HORTON**, a chapelry in the

p. of Beckley, partly in Bucks, and partly in Oxfordshire,  $6\frac{1}{2}$  m. NE of Oxford. Area 2,460 acres. Pop. in 1831, 405; in 1851, 426.

**STUDLEY-ROGER**, a township in the p. of Ripon, W. R. of Yorkshire,  $1\frac{1}{2}$  m. WSW of Ripon. Area 939 acres. Pop. in 1831, 157; in 1851, 169.

**STUDZIANA**, a town of Poland, in the woiwodie of Sandomir, obwod and 12 m. NNE of Opoczno, near the r. bank of the Pilica.

**STUHLINGEN**, a town of the grand-duchy of Baden, capital of a bail. of the same name, in the circle of the See, near the r. bank of the Wutach, at an alt. of 492 yds. above sea-level. Pop. 1,050. It has a castle, a custom-house, and a Capuchin convent, and possesses manufactories of hosiery, and several tanneries. This town was the capital of the ancient landgraviate of the same name. Pop. of bail., 4,600.

**STUHL WEISSENBURG**, a comitat or county in the W of Hungary, lying between the coms. of Veszprim and Pest, from which last it is separated on the E by the Danube. Its territorial extent is 1,600 sq. m.; its pop. 190,000, partly Slavonians, partly Magyars and German settlers. Except in the N, where it has a few hills, it is in general level, and in many places spreads into lakes and marshes. Besides the Danube, it is watered by the Sarvitz, which is formed into a canal for a considerable part of its course. The principal productions are wheat, wine, and tobacco. The administrative subdivision is into the circles of Sarnellek, Csakvar, and Bitsk.

**STUHL-WEISSENBURG**, or **SZEPES-FEJÁRVAR**, the capital of the above com., and a bishop's see, built by King Stephen in the 11th cent., and during five centuries the place where the kings of Hungary were crowned and buried, is situated 34 m. SSW of Buda, on the W border of the great morass of Sarvatt. The removal of the court, and still more repeated sieges in wars with the Turks, have greatly reduced it from its early importance, though it still contains several respectable buildings. It was formerly traversed by several canals, but these have been neglected during the agitated state of the country, are choked up, and the marshes in the vicinity render the town to a certain degree unhealthy. The pop. is 22,600. It has a gymnasium or high school, and barracks for soldiers; but its fortifications were demolished in 1702. There are here some woollen manufactures, such as coarse cloth and flannel; but gardening and tillage form in this, as in other parts of Hungary, a main occupation even of those who live in the town. The environs are fertile, and produce wine. In the neighbourhood is a saltpetre work.

**STUHM**, a circle and town of Prussia, in the prov. of Prussia, and regency of Marienwerder. The circle comprises an area of 90 sq. m. Pop. 21,529. The town is 14 m. NNE of Marienwerder. Pop. in 1843, 1,219. It is entirely enclosed by the lakes of Barlewitz and Hinter, and has two gates, two bridges, an old castle, two churches, a Catholic, and a Lutheran, and a synagogue. The Poles were here defeated by Gustavus Adolphus, in 1630.

**STUKELEY (GREAT)** a parish in Hants, 2 m. NW of Huntingdon. Area 2,990 acres. Pop. 482.

**STUKELEY (LITTLE)**, a parish in Hants, 3 m. NW of Huntingdon. Area 1,500 acres. Pop. 409.

**STUMPSTOWN**, a township of Dauphin co., Pennsylvania, U. S., on a branch of the Little Swatara, 24 m. ENE of Harrisburg.

**STURA**, a river of Italy, in Piedmont, which takes its rise in Mount Argentierra, on the borders of France, traverses the division of Coni; and after a NE course of 80 m., discharges itself into the Ta-



naro, on the l. bank, near Cherasco. Its principal affluent is the Vermegnana.—Also another river of the Sardinian states, in the duchy of Montferrat, which falls into the Po at Ponte-di-Stura.—Also a third river of the Sardinian states, which rises in the Cottian Alps, on the borders of Savoy, and falls into the Po 3 m. above Turin.

**STURBRIDGE**, a township of Worcester co., Massachusetts, U. S., 55 m. WSW of Boston, watered by the Quinebaug. Pop. in 1850, 2,119.

**STURBRIDGE**, or **STOURBRIDGE**, a hamlet in the p. of St. Andrew-the-Less, Cambridgeshire,  $1\frac{1}{2}$  m. NNE of Cambridge, famous for its annual fair, commencing Sept. 28th, which continues a fortnight, under the jurisdiction of the university of Cambridge. It is attended by tradesmen and dealers of every description, from all parts of England, and is supplied with manufactures, provisions, and cattle.

**STURGE**, a township of St. Joseph's co., in Michigan, U. S., 83 m. SW of Lansing. Pop. 839.

**STURGE ISLAND**, an island in the Antarctic ocean, one of the Balleny group, in S lat.  $66^{\circ} 44'$ , W long.  $163^{\circ} 11'$ .

**STURGEON (LAKE)**, a lake of North America, under the parallel of  $54^{\circ}$ , which is connected with Pine-island lake, by the river Saskatchewan, and which also communicates with Lake Winnipeg by means of Sturgeon-Weir river. It forms an irregular horse-shoe, one side of which runs NW, and bears the name of Pine-island lake; the other, and larger, known by the name of Sturgeon-lake, runs to the E of N. Its length is about 27 m.; its greatest breadth about 6 m.

**STURGEON-WEIR**, a river of North America, which discharges itself into Sturgeon lake. It is almost one continual rapid; and its course, including windings, may be about 30 m.

**STURMERE**, a parish in Essex,  $5\frac{1}{2}$  m. W by S of Clare. Area 945 acres. Pop. in 1851, 351.

**STURMHAUBE**, a mountain of Prussian Silesia, in the Riesengebirge chain, in the circle of Hirschberg, having an alt. of 4,740 ft. above sea-level.

**STURMINSTER-NEWTON-CASTLE**, a parish and market-town in Dorset, 8 m. SW of Shaftesbury, and 16 m. NNE of Dorchester, on the banks of the river Stour, over which there is here a bridge of 6 arches. Area of p. 4,229 acres. Pop. in 1801, 1,406; in 1831, 1,831; in 1851, 1,916.—The town, which is situated on both sides of the Stour, is of high antiquity. The principal manufacture is white baize. The clothing trade, formerly carried on, has entirely declined.

**STURMINSTER-MARSHALL**, a parish and village in Dorsetshire, 4 m. W of Wimborne-Minster, on the river Stour. Area 3,851 acres. Pop. 872.

**STURRY**, a parish and village of Kent,  $2\frac{1}{2}$  m. NE of Canterbury, on the N bank of the Stour, over which there is here a bridge. Area 3,089 acres. Pop. in 1831, 925; in 1851, 997.

**STURSTON**, a hamlet in the p. of Ashbourn, Derbyshire, 1 m. E of Ashbourn. Pop. in 1831, 578; in 1851, 664.—Also a parish in Norfolk,  $4\frac{1}{2}$  m. S by W of Watton. Area 2,000 acres. Pop. in 1831, 49; in 1851, 62.—Also a parish in Suffolk, 3 m. N by W of Eye, near the line of the London and Norwich railway. Area 775 acrts. Pop. in 1831, 212; in 1851, 241.

**STURT**, a county of South Australia, skirted by the river Murray, and the dividing range between the rivers Gawler and Rhine.—Also a river of S. Australia, which rises in Mount Lofty, and flows into the gulf of St. Vincent.

**STURT BAY**, a large bay of S. Australia, situated upon the S coast of York peninsula, nearly midway between Troubridge-shoal and Cape-Spencer. It presents a good place of refuge for

shipping on meeting with SW and W winds, when bound to the westward, or indeed during a north-easter, if bound to Port-Adelaide. In Flinders' chart this bay is represented as surrounded by shoals, to the extent of 3 or 4 m. from the shore; but Flinders does not appear to have examined the soundings minutely, and the line of shoal ground is laid down rather as conjectural than as having been ascertained. In reality, the shoals do not exist. The bay may be approached with safety; and good anchoring-ground will be found near the W shore in 7 fathoms, sandy bottom, at about 1 m. from the beach; in 4 fath. at about half that distance. On the E shore of the bay, near Troubridge-hill, the water is deep, and a vessel may approach within 4 m. of the beach before obtaining soundings with 7 fath. line. The W shore of the bay is formed by a promontory of low sand-hills, clothed with grass and trees, terminating in a flat rocky point which forms an effectual break-water during SW gales. Although the bay is open to the S and SE, winds from these quarters, owing to the narrowness of the strait, do not raise a sea sufficient to impede a vessel in weighing anchor.

**STURTON**, a township in the p. of Stow, Lincolnshire, 8 m. SE of Gainsborough. Pop. in 1831, 318; in 1851, 519.—Also a parish in Notts, 6 m. ENE of East Retford. Area 4,610 acres. Pop. in 1831, 638; in 1851, 637.

**STURTON (GREAT)**, a parish in Lincolnshire,  $5\frac{1}{2}$  m. NNW of Horncastle. Area 1,440 acres. Pop. in 1831, 138; in 1851, 138.

**STUTTENBERG (CAPE)**, the S extremity of Xul-la-Talyabo, in the Molucca group, in S lat.  $1^{\circ} 5' 6''$ .

**STUTESBURY**, or **STUCHBURY**, a parish in Northamptonshire, 5 m. NW by N of Brackley. Area 1,007 acres. Pop. in 1831, 29; in 1851, 38.

**STUTTGARD**, or **STUTTGART**, the capital of the kingdom of Württemberg, situated in N lat.  $48^{\circ} 46'$ , E long.  $9^{\circ} 11'$ , on the small river Nisselbach, in a valley, 2 m. from the Neckar, 97 m. S of Frankfurt-on-the-Main, at an average alt. of 275 yds. above sea-level. Pop. in 1840, 38,727, in 7,016 families, inclusive of the garrison of 1,500 men. It consists of three parts—the town proper, two suburbs adjacent to each other, and a separate suburb called Esslingen. The town proper is badly built, the streets being narrow, and the houses frequently of wood. The suburbs are less antique, particularly that of Esslingen, in which are the royal palace, the gymnasium, the barracks, and several public buildings. Around the palace, which is a large edifice, consisting of a body and two wings, are several public establishments, a spacious opera-house, a theatre, a museum, a garden, a polytechnic school, and an academy for painting, sculpture, and architecture. The royal library in 1841 contained 180,000 volumes, among which were an unique collection of 8,600 Bibles comprising editions of every age and every country. The gymnasium has an observatory, and a good collection of mathematical instruments. The other public buildings are an old palace, now converted into government offices, a mint, a town-house, an old church called the Stiftskirche, and the Marshall or royal stables. Though surrounded by a wall and ditch, S. is a place of no strength, and though repeatedly entered by opposing armies, between the years 1796 and 1815, it escaped altogether those calamities which pressed so severely on it in the wars of the 16th and 17th cents. The manufactures consist of leather, hats, cotton, silk, plated goods, printing-types, paper, and snuff. S. is a city of considerable activity and resources. It has the reputation of possessing the best pianoforte and musical instrument manufacturers in Germany. It has 40 bookselling-establishments and 26 houses in the printing business, besides 5 letter and 3 stereotype foundries, together with its trade in wool, cotton, silk, &c. The expenditure of the court and nobility contributes considerably to the support of the place.

**STUTTON**, a parish in Suffolk, 7 m. S of Ipswich, on the N bank of the Stour. Area 2,725 acres. Pop. in 1831, 475; in 1851, 455.

**STUTTON-WITH-HAZLEWOOD**, a township

in the p. of Tadcaster, W. R. of Yorkshire, 2 m. NW of Tadcaster. Area 2,610 acres. Pop. in 1851, 347.

STUTZAITZA, or KARAHOA, a town of Turkey, in Romelia, in the sanj. and 42 m. SW of Ghiustendil, at the confluence of the Braunista, and the Egridereh. Pop. 4,000.

STUTZERBACH, a village of Prussian Saxony, in the circle of Schleusingen, 4 m. SW of Ilmenau. Pop. 400.

STUYVESANT, a township and village of Columbia co., in the state of New York, U. S., 18 m. S of Albany. Pop. in 1840, 1,779; in 1850, 1,766.

STYR, a river which rises near Olesco, in Austrian Galicia, and flowing NNE into the Russian gov. of Volhynia, joins the Prepet, on the r. bank, in the gov. of Minsk.

STYRIA, or STEYERMARK, a central duchy of the Austrian empire, which receives its name from the old castle of Styr, situated where the river Steyer falls into the Ens. Though this province, with Croatia, Carniola, Carinthia, and Wendishmarch, were formerly districts of the ancient *Pannonia*, yet Croatia excepted, they lost that denomination by falling to the house of Austria. S. contains, according to the cadastral returns of 1850, 390.9 German sq. m.; and according to Lichtenstern, 8,580 British sq. m. It is bounded by Upper and Lower Austria on the N; by Hungary and Croatia on the E; by Carinthia and Carniola, or the Illyrian government on the S; and by Carinthia and Upper Austria on the W. It is divided into Upper S. and Lower S. The former, lying to the S of the latter, is about 110 m. in length, from W to E; and from 25 to 45 m. in breadth, from N to S. Lower S. is about 80 m. in length from N to S, and 48 m. from E to W. Upper S. is very mountainous, containing many mountains of stupendous elevation, in the range of what are called the Styrian Alps, being a continuation of the Julian Alps; but the whole is well-cultivated; inasmuch that in many places the hills are cultivated to their summits. The culminating summits are the Gremming, alt. 7,400 ft., and the Eisenhut, alt. 7,646 ft. The dwellers in these Alpine regions, during winter, when large quantities of snow fall, are for several months imprisoned in their houses; and, even in summer, seldom come down from their habitations. They are a hardy and temperate race, and in this respect present a great contrast to the inhabitants of Lower S., who are in general of weak organization and dissolute habits. The mountains support large numbers of cattle, wild fowl, game, and chamois or Alpine goats; and the brooks and lakes, many of which are situated between elevated cliffs, abound in fish.

Upper S. is chiefly famous for its mineral productions, such as silver, lead, and copper, but particularly iron. The iron mines of Eisenarz and Vorderberg are the most celebrated. One great advantage, for working the mines and smelting the iron of this district, is the abundance of wood with which the sides of the mountains are clothed in the neighbourhood of these mines. The steel of S. has been long of high celebrity, being greatly extolled by the ancient historians, and particularly by the elder Pliny; it was used by the Romans in manufacturing their swords, and is exported in great quantities to England. Silver was formerly mined in S.; but the silver mines of Zeyring have been under water since 1658. There are large salt works at Aufsee. The chief rivers that water Upper S., are the Mur or Muhr, and the Ens or Enns.

Lower S. is less mountainous and more fertile than Upper S. Excellent wine is produced in the eastern parts of this division; hot baths and medicinal springs also abound. At Pettau on the Drave, are

considerable lead mines, producing, on an average, 5,000 tons yearly.—The whole duchy contains 120 towns, a vast number of villages, and in 1820 the pop. was 777,926; in 1850, 1,006,971. Two-thirds of the pop. are Germans; the other third are Wendes of Slavonian origin, who speak a particular dialect. The great majority of the inhabitants are Catholics, but there are about 2,500 Lutherans. The duchy is divided into 5 circles, viz. Grätz, Marburg, Cilly, Bruck, and Judenburg.

[History.] Our earliest accounts of S. are derived from Pliny and Strabo, who considered its inhabitants as descended from the *Boii* and the *Taurisci*. They are described as harassing the adjoining provinces by their incursions, till the reign of Tiberius, when S. was included in the province of *Noricum*. In the 4th cent. Christianity was introduced; but on the irruption of the northern hordes, S. was almost as unfortunate as the adjoining provinces of *Illyria* and *Pannonia*. In the reign of Charlemagne, a tribe of barbarians submitting to his arms, fixed themselves on the banks of the Drave, the Save, and the Muhr; and from them are descended the Wendes now found in these districts. In 1172 it was annexed to Austria, and has since been governed either by the sovereign of that country, or by a member of his family.

STYRRUP, a township in the p. of Blyth, Nottinghamshire,  $3\frac{1}{2}$  m. SW by W of Bawtry. Pop. in 1831, 510; in 1851, 603.

STYRUM, a village of Prussia, in the reg. and 15 m. NNE of Düsseldorf, near the r. bank of the Ruhr or Roer. Pop. 600. It gives title to a family—that of Limburg-Styrum—which has borne a conspicuous part in the history of the Netherlands, and whose representative was active in the counter-revolution of Holland in 1814.

SUABIA, or SCHWABEN, one of the ten ancient circles or great divisions of Germany; situated in the SW of the empire; and bounded on the W by France, and on the S by Switzerland, the Rhine forming the limit between both. The pop. of this district has long exceeded 2,500,000; and its soil, with the exception of the rugged and mountainous track called the Black-forest, is in general fertile, yielding wheat, barley, oats, hemp, flax, and, in warm situations, vines. It is supposed to have derived its name from the *Suevi*, a German tribe who settled here about the time of Julius Cæsar. It was erected into a dukedom by the Franks in the 5th cent., and continued to be thus governed until the 13th, when the reigning family became extinct. After the extinction of the ducal title, it was divided among a number of petty princes. The Bavarian dominions at present extend over a part of S., but the chief part of the circle forms the kingdom of Württemberg and the grand-duchy of Baden; a smaller portion is subject to the princes of Hohenzollern.

SUABO, a river of Mozambique, which joins the Zambese, on the l. bank, 30 m. above Sena.

SUACHA, a settlement of New Granada, 9 m. S of Santa-Fe, containing 100 houses.

SUAKIN, a port of Nubia, on the W coast of the Red sea, in N lat. 19° 16'. The Turks obtained possession of it at the same time that they occupied the opposite coast of Arabia, and they still retain it, but their power is circumscribed within the limits of the island on which the town is situated, which does not exceed a third of a mile in any of its dimensions. In the 15th cent. S. was a place of wealth and importance, the emporium of the Red sea, and one of the richest cities of the East; it has suffered extreme decline, and is now almost in ruins. The port, however, retains its excellence, and is capable of containing 200 large vessels, which can anchor close to the island in 7 fath. The approach to it is rendered dangerous by the rocks and shoals which lie off it; and its *core* or mouth is so narrow as to render it impracticable to enter with any but the most favourable wind. Two minarets give the town a handsome appearance at a distance; and the buildings being white washed, and on an elevated site, look better than they really are. The houses are very small. S. is supposed to be the *Soter Limen* of Diodorus, and the *Theon Sotes* of Ptolemy. Its importance in the Middle ages was derived from its being the maritime capital of the Turks in the Red sea, when that empire maintained there a pow-



erful navy. It is now supported only by being still the channel by which communication is maintained between Arabia and the interior of Africa. Pilgrims, slave-dealers, or persons combining both these characters, quit the Nile at Shendi, and proceed through Takka and other districts of Nubia, to this port, where they embark for Jidda. They bring chiefly slaves, and ostrich feathers, with a little ivory and gold, and take Indian goods in return. The natives are of a dark copper colour, with woolly hair. The country in the vicinity, and the coast to a considerable extent, are occupied by a hardy race of Bedouin Arabs, called Suakini. For supplies, S. is dependent upon Ulgaif, situated on the main, at the bottom of the cove.

SUAN, a town of Hindostan, in the prov. of Bahar, and district of Rotas, in N lat. 25° 15'.

SUANCES, a village of Spain, in the prov. and 12 m. W of Santander, on the W coast of a small bay of the same name. Pop. 500.

SUAN-YANG, a town of Corea, 35 m. W of Tsin-tchen.

SUAPURE, a river of Guayana, which collecting the waters of many other rivers, descending from the Sierra Mayguahda runs W, and enters the Orinoco, opposite the rapid stream of the Marumaro, after a course of 120 m.

SUATA, or SUAPA, a settlement of New Granada, in the prov. and 70 m. N of Tunja.

SUAZA, a river of New Granada, in the prov. of Neiva, which runs W, and enters the Magdalena opposite La Plata.

SUBARKAN, a village of Asiatic Turkey, on the Euphrates, 75 m. ESE of Kerkesieh.

SUBATU, or SABATHU, a military station on the southern slope of the Himalaya, 15 m. SSW of Simla, at an alt. of 4,200 ft. above sea-level. A geological section of the country from Pinjor, NNE to Simla, passing through S., exhibits an old beach-line of shingle and boulders ranging along the S foot of the Sewalik hills, and gradually thinning-off towards the plains. It then crosses the sandstone beds of the Sewaliks, which are probably of the miocene age, and have a general dip to the NE. This sandstone is prolonged to the NW beyond Jumbu, and in that direction occupies a much greater superficial area. Following the section we find the Pinjor valley occupied with gravel, resting on the Sewalik beds; and at Buddi similar sandstones re-appear, succeeded first by confused strata of red shale, and at the Kussowlee range by calcareous sandstone, having a similar dip, and in some beds containing *turritellæ*. This is succeeded by nearly vertical beds of gypsiferous shale, and sandstone in Chota-gumber valley. In some of the beds are traces of *algæ*, also saurian bones, and *turritellæ*. The Subatu range then rises out of this valley, and consists of red shales, like those of the Kussowlee range, succeeded by alternating beds of shale with *turritellæ* and fossil bones, limestone, nummulitic rock, and red shale. On these repose red shales and sandstone, the whole having a general dip to the SE. In the Burra-gumber valley, NE of Subatu, a great fault occurs, and vertical beds of dark slates and coarse limestone, without fossils, are exposed by the river. From hence to Simla we pass over hills of shales and slate, with beds of coarse limestone; and Simla itself is for the most part composed of similar rocks, quite unfossiliferous throughout.

SUBBERTHWAIT, or SATTERTHWAITE, a township in the p. of Ulverstone, co. palatine of Lancaster, 6 m. ENW of Ulverstone. Area 1,246 acres. Pop. in 1831, 163; in 1851, 150.

SUBBIANO, a town of Tuscany, in the prov. and

45 m. ESE of Florence, on the l. bank of the Arno.

SUBBULGHUR, a town and fortress of Hindostan, in the prov. of Agra, in N lat. 26° 22'. It is surrounded by a stone wall, with a number of bastions. The country in the vicinity is well-cultivated.—Also a town of Hindostan, in the prov. of Delhi, on the E side of the Ganges, and now included in the district of Moradabad. It formerly possessed a stone fort, which is in a ruinous state; but the town is improving since it came under the British authority.

SUBIACO, a town of the Papal states, the cap. of a district in the Campagna-di-Roma, situated on an eminence near the river Teverone, 12 m. NW of Alatri. Its early buildings are supposed to have been erected out of the ruins of a villa of Nero.

SUBIBA (CAPE), a cape in the SE of Spain, on the coast of Murcia, in N lat. 37° 30'.

SUBIJANA, a village of Spain, in the prov. and 15 m. W of Vitoria, on the l. bank of the Bayas.

SUBITAN, a village of Asiatic Turkey, on the frontiers of Georgia, 5½ hours from Kars.

SUBLITZ, a village of Prussian Saxony, 2 m. W of Torgau, near which, on 3d November, 1760, was fought an obstinate and sanguinary battle between the Prussians and Austrians, commonly called the battle of Torgau.

SUBROY, a town of Hindostan, in the prov. of Cutch, on the road from Luckput Bunder to Mandavie. It is defended by a citadel, and is a populous place.

SUBULTER, a parish in co. Cork, 4½ m. ENE of Kanturk. Area 742 acres. Pop. in 1851, 135.

SUBUNRIKA, a river of Hindostan, which divides the provs. of Orissa and Bengal; and, till 1803, formed the boundary between the British and the Nagpore Mahrattas. It rises in the S of Bahar, and flows in a SE course of 240 m. to the bay of Bengal, at Piply. It is fordable, except in the rainy season, and was the first river of Bengal into which Europeans were allowed to enter.

SUBZOW, a small town of European Russia, in the gov. of Tver, on the Wolga. Pop. 1,100.

SUCAIFE, a village of Hedjaz, in Arabia, 25 m. SE of Yambo.

SUCAYNA, a village of Spain, in the prov. and 26 m. NW of Castellon-de-la-Plana. Pop. 650.

SUCCA, a small port of Tripoli, in the gulf of Sidra, 45 m. SE of Mesurada.

SUCCADANA, a town on the W coast of the island of Borneo, in S lat. 1° 30', on the principal or southern outlet of a large river which is navigable 150 m. for prows. It is celebrated for diamonds, and for the best camphire; and is also a considerable mart for opium. Gold dust, tin, and pepper, are also exported from it.

SUCCESS, a township of Coos co., New Hampshire, U. S., 23 m. E of Lancaster.

SUCHILTEPEC, a town of Guatemala, 90 m. NW of New Guatemala, on a stream of the same name. Pop. 3,000.

SUCHTELON, a town of Prussia, in the reg. and 18 m. WNW of Dusseldorf. Pop. 1,500.

SU-CHU, a district and town of China, in the prov. of Chih-le and dep. of Shun-teen-fu.

SU-CHU-FU, a department and town of China, in the prov. of Keang-su. The dep. comprises 10 districts. The town is a little to the E of Lake Taihou, and 120 m. ESE of Nan-king, in N lat. 31° 23' 25", E long. 120° 28' 55". It is one of the finest and most agreeable towns in China. It covers a large space, and is defended by high walls and good ramparts. It is intersected by numerous fresh-water canals. A noble canal, having, says Mr. Fortune,

"all the appearance of the river Thames at Richmond or Twickenham, runs parallel with the city walls, and acts as a moat as well as for commercial purposes. Here, as at Cading and Ta-tsong-tsen, a large number of invalided junks are moored, and doubtless make excellent Chinese dwelling-houses. The canal is carried through arches into the city, where it ramifies in all directions, sometimes narrow and dirty, and at other places expanding into lakes of considerable beauty, thus enabling the inhabitants to convey their merchandise to their houses from the most distant parts of the country. Junks and boats of all sizes ply and sail on this wide and beautiful canal, and the whole place has a cheerful and flourishing aspect, which one does not often see in the other towns in China, if we except Canton and Shanghai. The E wall, along the side of which I went all the way, is not more than 1 m. in length, but I suspect the N and S are much longer, thus making the city a parallelogram. That part of the city near the E gate, by which I entered, is anything but fine—the streets are narrow and dirty, and the pop. seems of the lowest order; but towards the W the buildings and streets are much finer, the shops are large, and everything denotes this to be the rich and aristocratic part of the town." The houses are generally well-built and neatly decorated. The surrounding district is noted for its fertility, salubrity, and beauty, and is denoted the paradise of China. This town is also celebrated throughout the empire for its brocades and for its printing presses. Books form one of its chief articles of trade. "Every one who has been in China," says Mr. Fortune, "or who is at all acquainted with Chinese history, has heard of the city of Soo-chou-foo. If a stranger goes into a shop in Macao, Canton, or in any of the other towns in the south, he is sure to be told that anything out of the common way which he may want to purchase has been brought from that celebrated place; let him order anything superb, and it must be sent for from Soo-chou,—fine pictures, fine carved work, fine silks, and fine ladies, all come from Soo-chou; it is the Chinaman's earthly paradise, and it would be hard indeed to convince him that it had its equal in any town on earth."

**SUCK**, a river of Connaught, belonging slightly to co. Mayo, but chiefly to cos. Roscommon and Galway. It is popularly regarded as issuing from Lough O'Flynn, situated several miles ESE and SW of the sources of its actual head-streams. It flows  $\frac{1}{2}$  m. eastward from Lough O'Flynn to Castlereagh, and 10 m. SSE from Castlereagh to the Shannon, at a point  $\frac{1}{2}$  m. below Shannon-bridge. The surface elevation of the Suck above sea-level is 255 ft. at its debouch from Lough O'Flynn, and 115 ft. at its embouch into the Shannon; so that the total fall of the river is 140 ft.

**SUCKLEY**, a parish in Worcestershire,  $\frac{5}{8}$  m. ESE of Bromyard, including the chapelries of Alfrick and Lulsley. Area 5,184 acres. Pop. 1,193.

**SUCKLING (CAPE)**, a cape on the W coast of N. America, in N lat.  $60^{\circ} 1'$ .

**SUCTASGUR**, a town and fortress of Hindostan, in the prov. of Allahabad, 14 m. S of Chunar. The fortifications were formerly of considerable extent, and defended the passes into the western hills.

**SUCURUI**, a river of Brazil, in the prov. of Goyaz, which joins the Pardo, a tributary of the Parana.—There is another river of this name which falls directly into the Parana, under the parallel of  $20^{\circ} 10' S$ , with a mouth 50 fath. wide.

**SUCUT**, a town of Hindostan, in the prov. of Lahore, intersected by the Bevah, in N lat.  $32^{\circ} 41'$ .

**SUCZAVA**, a town of Austrian Galicia, in the Bukowine, 12 m. N of the confluence of the rivers

Suczava and Sereth, 70 m. W of Jassy. It is surrounded with a wall and ditch, and contains about 4,000 inhabitants, but is only the shadow of what it once was when the residence of the princes of Moldavia.—The river S. rises on the N flank of the Carpathians; runs N, then ENE, and then SE; and joins the Sereth on the E bank, after a course of 90 m.

**SUD**. See RIVIERE-DE-SUD.

**SUDAK**. See SOUDAK.

**SUDAN**, or BILED-ES-SUDAN, [*i. e.* 'the Land of the Blacks,'] a name given by Arabian geographers to that portion of the African continent which stretches to the S of the Sahara, from the Nile on the E, to the Atlantic on the W. See article NIGRITIA.

**SUDBORNE**, a parish in Suffolk,  $\frac{1}{2}$  m. N of Orford. Area 5,429 acres. Pop. in 1851, 601.

**SUDBOROUGH**, a parish in Northamptonshire,  $\frac{3}{4}$  m. NW of Thrapston, watered by a branch of the Nene. Area 1,781 acres. Pop. in 1851, 367.

**SUDBROOK**, a parish in Lincolnshire, 4 m. NE of Lincoln. Area 1,000 acres. Pop. in 1831, 84; in 1851, 90.—Also a parish in Monmouth,  $\frac{1}{2}$  m. SSW of Chepstow.

**SUDBURY**, a borough and market-town in Suffolk, 21 m. W by S of Ipswich, on the river Stour, over which there is here a stone-bridge, communicating with the township or hamlet of Ballingdon-cum-Blunden. Pop. in 1801, 3,283; in 1831, 4,677; in 1851, 6,043.—The town, originally called Southburgh, is of great antiquity, and ranked at one period as the capital of the county. It is a neat, clean, and well-built place. It was one of the early seats of the woollen manufacture; but for many years it has been discontinued, except the making of bunnings for ships' flags. The manufacture of silk, however, is extensively carried on here. In consequence of corrupt practices, the disfranchisement of this borough was effected in 1844. The number of electors at the period of disfranchisement was 594.—Also a parish in Derbyshire, 5 m. E by S of Uttoxeter, bounded on the S by the river Dove. Area 3,603 acres. Pop. in 1831, 642; in 1851, 570.

**SUDBURY**, a township of Middlesex co., in the state of Massachusetts, U. S., 20 m. W of Boston, bounded on the E by Sudbury river, a branch of Concord river. Pop. in 1840, 1,422; in 1850, 1,578.—Also a township of Rutland co., in the state of Vermont, 45 m. SW of Montpelier, bounded on the E by Otter creek. The surface is hilly, but the soil is generally fertile. Pop. in 1850, 794.

**SUDDAM**, a commune of Belgium, in the prov. of W. Flanders and dep. of Odelem. Pop. 390.

**SUDELEY-MANOR**, a parish in Gloucestershire, about 1 m. SE of Winchcombe. Area 2,622 acres. Pop. in 1831, 84; in 1851, 77. Sudeley-castle, built in a style of uncommon magnificence, in the time of Henry VI., is now an interesting ruin.

**SUDER-GHUR**, or GOTTARAO, a fort of Sindh, 50 m. NW of Roree, on the road thence to Jessulmair, in the Thur or Sandy desert. It is square in form, and is surrounded by a brick wall from 20 to 25 ft. high. In the interior is a keep. It is well-supplied with water. Near it is a village of the same name.

**SUDERMANIA**, an ancient province of Sweden, now comprised in the laens of Nykoeping and Stockholm.

**SUDEROE**, an island of the Atlantic, in the Feroe archipelago, 8 m. S of Sandoe, in N lat.  $61^{\circ} 30'$ , W long.  $11^{\circ} 50'$ . Pop. 1,000. It is one of the largest and the most southerly of the group, and is 33 m. in length from NW to SE, and very irregular in breadth. The numerous bays by which its coasts are indented divide it into a series of peninsulas



connected by only narrow isthmuses. It produces barley, rye, legumes, and in scanty quantities, oats, and affords pasturage to large numbers of cattle and horses. Its chief place is Gualboe.

**SUDER-OG**, a small island of Denmark, in the North sea, off the coast of the duchy of Sleswig, to the SW of the island of Pelworm.

**SUDETES**, a mountain-range of Germany, extending from the sources of the Oder to those of the Elster, on the S frontiers of Prussia; but the term is more strictly applicable to the chain which, running E and W, divides Silesia from Moravia.

**SUDFALL**, a small island of Denmark, in the North sea, off the coast of the duchy of Sleswick, to the SW of the island of Nordstrand.

**SUDHORSTEN**, a village of the principality of Schnaenburg-Lippe, bail and 6 m. NE of Buckeburg. Coal is wrought in the vicinity.

**SUDLOHN**, a town of Prussia, in the prov. of Westphalia, regency and 36 m. W of Munster, and circle of Ahaus, on the Slink. Pop. 700.

**SUDOJA**, a village of Sind; on the l. bank of the Indus.

**SUDSALO**, an island of Russia in Europe, in the gulf of Bothnia, near the W coast of Finland, in N lat. 60° 35', E long. 21° 21'.

**SUDUK**, a river of Beluchistan, which rises to the SE of Kedje, winds S, and falls into the Indian ocean, NNE of Cape Passani.

**SUECA**, a judicial partido and town of Spain, in the prov. of Valencia. The partido comprises 6 pueblos. The town is 24 m. SSE of Valencia, in a wide plain, between the S bank of Lake Albufera and the l. bank of the river Xnear, and near its entrance into the Mediterranean. Pop. 8,862. It is well-built and contains a handsome square, a parish-church, a convent, an hospital, and a Latin school. The streets are generally well-paved. The trade, which is considerable, consists chiefly in rice, wine, fruit, and silk.

**SUEDENBURG**, a town of Prussia, in the prov. of Saxony, regency and circle of Magdeburg. Pop. in 1843, 3,480.

**SUEDIAH**, or **SUWEIDIYEH**, a port of Syria, in the pash. of Aleppo, 18 m. SW of Antakia.

**SUEIRO-DE-COSTA**, a river of Upper Guinea, on the Ivory coast, which throws itself into the gulf of Guinea, near Great Bassam. Its source is unknown.

**SUEJOLS**, or **SEUGE**, a river of France, which has its source in the dep. of the Upper Loire, in the mountains of Margeride, on the SW coast of the dep.; runs first N, past Servieres; then E; bathes the walls of Sanguers; turns NE; and after a total course of 20 m., joins the Allier on the l. bank, a little above Prades.

**SUELLACABRAS**, a town of Spain, in the prov. and 21 m. E of Soria and partido of Agreda. Pop. 636. It is pleasantly situated at the foot of a mountain, and near the source of the Alhama.

**SUEMEZ**, an island of Russian America, in the W part of the Prince of Wales archipelago, and at the entrance to Port-Baylio-Bucareli, in N lat. 55° 15', W long. 137° 52'. It is about 27 m. in circuit.

**SUESCA**, a village of New Granada, in the dep. of Cundinamarca, and prov. of Bogota, on the r. bank of the river of that name, and 30 m. NNE of Santa-Fe-de-Bogota. Pop. about 100. It was formerly a large and populous town.

**SUEVRES**, a commune of France, in the dep. of the Loire-et-Cher, cant. and 4 m. SW of Mer, and near the r. bank of the Loire. Pop. 1,956. It is noted for its wine and vinegar.

**SUEZ**, a port of Egypt, on the borders of Arabia, about 4 m. from the head of that arm of the Red sea

which bears its name, in N lat. 29° 58' 36", E long. 32° 34' 15" [*Raper*], 72 m. E of Cairo. Although there must always have been a place of trade in this vicinity, the present town of S. appears to be of modern origin. According to D'Anville, it occupies the site of the ancient *Arsinoe*; but in the opinion of Volney, that place was situated towards the bottom of the gulf. The celebrated Arabian city, Kolzum or Kolzon, which, among that people, gave its name to the Red sea, was also further to the N: its ruins may still be traced; but the sea has so far retired that ships could no longer enter its harbour. This circumstance enforced the removal to S., which appears to have taken place about the beginning of the 16th cent., which soon became a flourishing mart, being at once the emporium of the trade with India, and the rendezvous of the numberless pilgrims, who, from every part of the Turkish empire, repair to the holy shrine of Mecca. It stands on a point of land between the head of the gulf which lies E and W, and a narrow arm which runs up northward from the E corner of the gulf. S., though a maritime place, is so situated, that vessels cannot approach nearer than 2½ m. from the town. From this point the water is divided into three channels, which unite before reaching the town, and through which the Arab boats called *dows*, and other small vessels, can pass. The surrounding country is a complete desert, composed of a bed of rock slightly covered with sand; trees, gardens, and meadows, are entirely unknown, and scarcely a plant is to be seen; all provisions and necessaries of life must be brought from Cairo. There is also an entire deficiency of water, unless of the most offensive description,—clear indeed to the eye, but disgusting to the smell and taste. By long keeping it loses some of its bad qualities; but it is then sold at a very high price. It is obtained from two springs. One of them, called El-Bir, is situated about three quarters of an hour N of the town; its water is brackish, and is given to the animals to drink, and is used for watering. The other, called Kuergada, is on the Asiatic side of the gulf, at the foot of a hill 3 leagues to the SE of Suez; its waters also are slightly brackish. This spring never fails, and the basin which it has formed at its mouth is 30 ft. in circumf. At half a league from it are 15 other springs of brackish water in the vicinity of each other: these are the fountains of Moses [*Rochet*]. The town, which contains about 2,500 inhabitants, governed by a bey, contains a few stone houses, of which more than half were destroyed by the French, and still continue in ruins; but the greater part of the houses or huts are of sun-dried bricks. It has several mosques and a Greek church, a small bazaar or row of shops, and several caravanserais. It is walled on three sides, but open to the gulf on the NE. The houses are built so close together that it can be entered from the land side only at one point, which is defended by cannon; but these defences are of no use, unless against the Arabs, and could not withstand the attack of 50 regular troops for half-an-hour. Upon the whole, S. in itself is a miserable place; its trade lies under many disadvantages, particularly from the difficult navigation of this upper part of the Red sea, where vessels can only pass through a narrow channel amid rocks often sunk beneath the surface. Danger also arises from the N winds, which blow with great violence for nine months in the year. Cosseir, less liable to these disadvantages, is now, notwithstanding the inconvenience of a longer and more difficult land-journey, often preferred for the trade to Egypt. The journey from S. to Cairo is usually performed in 3 days, sometimes with light baggage in 2. The route by Cosseir, to Kench or to





be always transmitted by this canal, and ships fitted up expressly for passengers would regularly ply upon the shorter line of communication. Were it found practicable to employ steam-power, it is probable that the voyage from England to Bombay might be accomplished by the canal in six weeks, the distance being about 7,200 m. The engineers who accompanied the French army ascertained that traces of a canal which had in some remote age passed across this isthmus, still remained; and Arabian geographers attest that this canal—of which the outline has been traced above—was used for the purposes of navigation from 644 to 767. Yet the reports on this subject by our own engineers and naval officers, with the exception to be afterwards noticed, concur in representing the canal scheme as absolutely impracticable. In the appendix to Mr. Galloway's observations, an engineer who surveyed the spot reports as follows:—"I started from Suez on the 10th of March, 1844. In six miles from that place fell in with the remains of what is called the ancient canal, which extends about 9 m., but beyond that nothing whatever is visible. I directed my course to Sheikh-Anedik, occasionally diverging from r. to l., and so on to the Bir El-Arass and the Bir-El-Dowedar, all of which appear on the map; and when within sight of the bay of Tineh I could not approach it owing to the land being very swampy. Having achieved all I sought for, viz., an examination of the different lines projected, I retraced my steps into the El-Arish road, and skirted the desert up to Salich, and near to Belbeis, where I turned off across the country, and joined Moses' Canal at Zag-Zig, thence proceeded into the Damietta branch of the Nile round the head of the Delta, and down the Rosetta branch to the Atfé. The direct line proposed by Captain Vetch is impracticable, inasmuch as it presents overwhelming difficulties of sand-mountains, besides very high and low levels. The second line proposed would also be attended with similar obstructions; the third, that of uniting the lake of Menzaleh with the Bitter lakes and the Mediterranean, is equally impracticable, inasmuch as they are mere marshes. Indeed, after paying due attention as to the possibility of finding a suitable line for a canal, I confess I gave it up as impossible, and look upon the project as a hopeless one. Starting from S., where there would be considerable work to form into deep water an approach from the shore, and viewing the immense work to form an artificial port and channel into deep water seaward at Tineh, or any part in its neighbourhood, as well as the variable levels and marsh land for several miles before reaching it, I have come to the resolution of its being an impracticable affair, and one in which millions may be spent in the attempt to effect it, and in the end must be abandoned. What may have existed in the time of the ancients I know not, but my own eyes convince me if any canal of importance ever was used, the land must have undergone a material change, and what was available then is by this change rendered impracticable now; I am, therefore, disposed to look upon the report of the French commission with vast suspicion, and more particularly when I see their fellow-countrymen resident in Egypt following up the same ideas on most erroneous data." Captain Glascock says: "I have not the slightest hesitation in transmitting to you my professional opinion upon the impracticability of trading vessels of any draught of water attempting to navigate the long, low, and treacherous line of coast extending between Rosetta and the shore in the immediate vicinity of Tineh. A recent passage from Beyrut to Alexandria afforded me sufficient of personal observation to convince me, as well as the master of the Tyne (an experienced navigator), that the coast in question may be pronounced as generally inaccessible, and for nine months out of the twelve in the year it may be regarded as truly unsafe for the purpose of commercial navigation. For several leagues the land is not discernible from a vessel's deck at the short distance of 4 m." The whole of the Mediterranean shore between Alexandria and Gaza is so extremely shallow that the idea of ever having an uninterrupted line of communication by ships or steamers of a large class must be now abandoned as impracticable. The immediate vicinity of Tineh is the spot reported by Mr. Jassmyer as the most eligible for a port, but he admits that it would be necessary to construct a mole to run into the sea fully 2,000 faths., at the extreme end of which there would be a sufficient depth of water for brigs or small vessels to lie. At a distance from the shore of 3,000 fath., or about 3½ m., the depth of water is only 27 ft., and the coast is so low that at that distance it can only be seen in clear weather.

Captain James Vetch, in opposition to this view, argues that the project of a ship canal across the isthmus is quite practicable. The distance between the Mediterranean and the Red sea, he estimates at 75 m.; and the level of the waters of the Red sea above those of the Mediterranean, at about 30 ft. This declivity, Capt. Vetch computes, would give a current of about 2 m. per hour; the canal being supposed to be of a size suitable for large vessels; and this velocity he considers abundant for maintaining a navigable channel, especially as the scouring efficacy of salt-water is superior to that of fresh, on account of its greater specific gravity. The ground between the two seas, he contends, presents no engineering difficulty; the water at S., however, is shallow; and the same objection he admits holds to the Mediterranean shore, or there is no port in the bay of Tineh, and but little depth of water. He is of opinion, however, that the current in the canal would suffice to cure these evils; for the indraught at S. would carry away the mud and sand opposite to the mouth of the canal; and the rush of water into the bay of Tineh would deepen the water there. The French engineers of 1860 proposed, with the view of giving a greater scouring efficacy

in the bay of Tineh, to carry the canal from S., for a certain distance, on a level, and to throw the whole fall into the remaining distance. The evil to be apprehended from this plan seems to be the formation of a bar at the mouth of the canal. There is reason for believing that in remote times the whole of the isthmus was submerged, constituting Africa a continent. The record of this state of things is preserved in the geological features of the country; the most prominent of which is, the existence of a number of salt-lakes and marshes, extending nearly across the isthmus; and, if the obstructions which now block up the ancient canal were removed, these lakes would assume the same level as the Red sea, and, in all probability, overflow into the Mediterranean. The track of canal which has been viewed with most favour, runs through these lakes; but Captain Vetch thinks that a straight cut across the isthmus, without weakening the current by needless bendings, or entangling it in lakes and marshes, is the preferable procedure. Indeed, there is danger, it has been suggested, in filling these lakes up to the Red sea level; as, in certain states of the Red sea, they would overflow through the valley which extends from the Bitter lakes to Bubastes, on the Nile, and the Delta might be inundated with salt water. Captain Vetch recommends that the entrance of the canal at S. should be capable of being closed by gates, and that it should be situated within a basin so as to protect the gates from the effects of storms. He also proposes that the bottom and sides of the entrance should be protected by a strong gauge of masonry, and piles of masonry, of the form of the cross section of the canal, should be constructed at regular distances, so as to prevent the current from making dangerous inroads. He estimates the cost of this canal at about £2,120,000; and Mr. Anderson computes that the receipts would be £200,000 per annum, or 10 per cent. on their outlay. The canal would be used chiefly by vessels to India; steam-vessels would, of course, make use of it in both directions; but sailing vessels from India would probably prefer the route to India by the Cape, on account of the prevalence of N winds in the superior part of the Red sea; and the difficulty, in so narrow a sea, of contending with them.

The *Journal des Debats*, discussing the question as to which would be better, a railway or a canal across the isthmus, says: "It is proposed by some to overcome the obstacle which now stops the trade and navigation of Europeans, Asiatics, and even Africans, at the isthmus of S., by a railway; by others by a canal. The problem to be solved is: which of the two systems is that which should be adopted? Nature has so disposed it that all political or commercial communications between the people which form the three continents composing the old world should take place by sea; consequently, that combination which would best serve the maritime interest is that which should be preferred." First, taking the railway project, the *Debats* goes on to state that between Alexandria, Cairo, and Suez is a distance of 80 leagues. The execution of a railway along this distance would be easy. With but one line of rails it would cost about 30 or 40 millions of francs, and its working would not cost much, under the dry and preserving climate of Egypt, though it would have to be preserved along parts of its course from the danger of periodical inundations. As regards transit, it would carry men and merchandise in about 20 hours from Alexandria to Suez—that is about one-third of the time taken under present circumstances. Compared in the matter of speed to a canal commencing from Pelusium, and having but two locks, one at each end, it would be beaten by steamers, and would gain little even on sailing vessels towed by tugs; it would have an advantage of three or four days upon sailing vessels propelling themselves in the best way they can, without the use of steam. This advantage reduces itself to very little indeed, if it is borne in mind that, for navigation, an economy would be made, by a canal, of two or three thousand leagues at least. On the other hand, the inconveniences of a railway are numerous. It does not in the least modify the condition of double transshipment. The existence of such a condition means literally this—complete uncertainty for trade, indeterminate delays, and every chance of a later arrival than if the grand road *via* the Cape had been chosen. Supposing that the isthmus was open by railway, and not by canal, and that a London merchant wished to send merchandise to Bombay or Colombo *via* the Red sea, he must take the precaution either of sending in advance a vessel by the Cape, or get a vessel freighted in India or at Ceylon to come to S., take in the cargo, and bring it to its destination. This would be simply a piece of extravagance on his part, taking it in a financial point of view, and subject besides, to risk which nobody would wish to incur. The proof of the impossibility of such an attempt is, that in spite of the perfection to which the service has arrived, nothing arrives in the port of S. but the Bombay and Calcutta steamers. Reasons of state alone cause the continuance of this service. A railway would thus be of little use for transit. It would indeed carry men and despatches more conveniently than they are carried at present, but then it would probably not have any increase of either. This is not what is counted upon to create a revenue for a railway, the length of which would extend to 80 leagues. Taken as a speculation the railway does not show itself in a more advantageous light. Passengers and intermediate stations, experience tells us, are the great source of profit. It is sufficient to cast a glance over a map of Egypt, to see that from Alexandria to Cairo two-thirds at least of the distance is uninhabited; and even were a population to exist, such a one would be plunged in abject misery, without trade or industry, without activity, as well as without desire to

acquire, because it would know where the fruits of its labour would be taken." Taking all circumstances into consideration, the railway would in reality be but a consecration for the trade of the world of the *status quo*: for Egypt it would be, financially, a ruinous affair, and it would introduce into its bosom a dangerous weapon, the explosion of which might take place anywhere but in Cairo or Alexandria. Still, writes the same authority in 1847, "it is because the material obstacles are the least in the affair, and it is because they affect immense interests, and because their completion will affect more or less profoundly the political and commercial situations of all Powers, that it has remained so long in suspense, and that perhaps it will remain so still longer. It appears that the policy of all cabinets is unanimous as to the principle; but every time when we wished to depart from theory to enter on the actual construction of the canal, violent dissensions have arisen, and each party more or less occupied with his own interests proposed to support a different system. Nevertheless, Mehemet Ali is not easily frustrated in his plans. Seeing the impossibility of gaining over governments to his views, he appeals to commerce, manufactures, and to the private interests of the nations which he knows to be in accord with his own: he has suggested the formation of a company of engineers and bankers which he wishes to interest in his project. And in order to tranquillize distrust,—to show his impartiality,—to prove that he merely wishes to hold the balance even between all interests and to give them all the fullest satisfaction,—he expressed a wish that this company should be composed of three groups, representing each one of the three great Powers of Europe most interested in the enterprise under political and commercial reports, viz., Austria, England, and France. This company is at present formed, and has declared in favour of the execution of a maritime canal, navigable at all seasons and for the largest ships, and it has acquired the certainty of being able to give such a canal 27 ft. of depth; that is more than sufficient to float a three-decker. Moreover, the company has agreed as to the distribution and division of the works. The English are to have, under the sanction and authority of the viceroy, the construction of the harbour at S., the French that of the canal from S. to Pelusium, and the Austrians the harbour to be created at Pelusium on the Mediterranean sea. The latter point created some uneasiness, as it was feared at first that it would cost an enormous sum, but a survey made on the spot by M. Negrelli relieved all doubts. The port may be formed at Pelusium and on better terms than could have been expected." There is little doubt that the ground along the isthmus of S. offers facilities for the formation of a ship-canal from Suez to Tineh. The length of the canal, including the bed of the Salt lakes, would be about 100 m., and the greatest serious difficulty would be the formation of a port at the point of communication with the Mediterranean. The enormous expense of forming this port and the danger which vessels would encounter in making it, are objections which may prevent this canal from being undertaken for many years. To the coasting-trade of Egypt, Arabia, and Syria, it would certainly be of considerable use; but to Great Britain, and even to the Mediterranean powers aspiring at a share in the Indian trade, it would be of little commercial use. The Mediterranean vessels which take in cargoes at Mocha might avail themselves of this route with advantage; and at those seasons of the year when the winds of the Red sea admit of quick passages to the N. some saving of time would certainly be effected to all ports between Marseilles and Bombay. But the hope entertained by Austria, France, and Italy, that this canal, if executed, would render their Indian trade independent of the London market, would probably soon be found to be a delusion; and most of the advantages to be expected from the construction of a ship-canal between the Red sea and the Mediterranean, might be attained as effectually by the formation of the two branches of the Nile flowing to Suez and Alexandria, a contemplated result of Mohammed Ali's grand scheme of the *barrage* of the Nile.—The project of a railway from Cairo to S., has met with as much favour among the English, as the ship-canal among foreigners. There are certainly no great engineering difficulties in the construction of the proposed line. The line surveyed by Mr. Galloway, in 1834, for a railway between Cairo and S. has an entire length of 84 m., with easy gradients, and no tunnels. It runs first to Alexandria, and then directly E. across the desert, to a point a little N of Aggeret, or Adjerat fort, where it turns S. to Suez, and passing on the W side of the town, reaches the coast of the gulf a little to the SW of Suez. "The desert from Cairo to S.," says Captain de Havilland, in 1808, "is in general a flat barren plain, divided by several low ridges of hills, except near Adgeroot, and at the back of Cairo, where there are some of considerable height and extent. The soil is a hard gravel, with pebbles. There are two principal routes, both extremely good, and of nearly the same length; viz. 63 m. from the cultivated ground to Adgeroot, where there is a well about 130 ft. deep, with an abundant supply of water, but very brackish, 51 m. from S. The upper or southernmost was that of the pilgrims to Mecca; the northernmost was adopted by our army as passing nearer Joferal, where water was found in the bed of a torrent." "Every one in these journeys," says Colonel Rooke, "goes armed, as the caravans are frequently attacked and plundered by the wild Arabs, who strip the people, and leave them to perish in the desert." This was in 1792. Colonel Capper, writing in 1778, thought "the danger with common discretion perfectly imaginary." With an armed escort, under the present government of Egypt, the chances of molestation are in all probability exceed-

ingly small. But a railroad for a weekly transit of passengers and goods, through a desert without a drop of water, is not likely, under any circumstances, to prove a profitable speculation. When a railroad exists from Bombay to Calcutta, it will be time enough to discuss the details connected with the execution of one from Cairo to Suez. If a railroad should ever be required for the communications between Europe and India, through Egypt, there can be no doubt that it must commence at Alexandria, and follow the banks of the branches of the Nile, which will connect that part of the Red sea. But it is an idle waste of time to speculate on such a future.

None of the various schemes for passing the isthmus above detailed have yet been realized. But another singular and ingenious proposal for effecting the long-desired communication is that of Major Sir W. C. Harris, who, in a letter addressed to the directors of the East India company in January 1845, observes, that "a railroad is at last unanimously admitted to be feasible, and the natural obstacles which were stoutly asserted to oppose its construction are proved to be imaginary. The line over which the rail must pass," he goes on to say, "far from being beset with difficulties to the engineer, has been ascertained to present a very favourable profile; and a hard gravelly soil is known to prevail in lieu of the shifting sands of the desert, which were skillfully conjured into existence by a fiction whose theory was to arrest the progress of the trains. Those who had a purpose to serve in thus opposing the construction of a railroad, are now compelled to admit that it could be made, and would fully answer the end of accelerating mails and passengers through Egypt; but they still cling to the scheme which dazzled the mind of Napoleon, and steadily maintain the necessity of piercing the isthmus, so as to obtain uninterrupted water communication by means of a canal, which would enable merchant vessels of the largest class to perform the voyage between Asia and Europe without discharging their cargoes. It is not my intention here to enter into any renewal of the discussion respecting the practicability of this stupendous project, or the impediments that are in array against it; but, admitting to the fullest extent the advantages of its object, I shall endeavour simply to show, in as few words as possible, how that object may be accomplished at infinitely less expense, by a much less complicated process and in a very much briefer space of time than by a canal. I propose to construct a class of narrow steam-vessels, of about 800 tons burden, suited for freight, and to transport them across the isthmus of S. upon trucks, by means of locomotive engines of adequate power. The vessels must be built upon the plan that will best serve to counteract any additional strain upon the sides involved by removal from the water, and the cradle truck upon which each will be placed during the transit must be constructed with the same view. The inaccessible character of the Mediterranean shore lying over against the sea of Suez, and the general unfitness of all the ports or roadsteads on that coast for vessels of any considerable draught of water, clearly indicate the Nile, about Cairo, as the most eligible point to which the railroad could be carried, in order that the laden steamers may be transferred from one to the other of the divided seas, through its always navigable channel. At the terminus on the Nile, and at the head of the sea of Suez, an inclined plane must be run out, under suitable shelter, to a distance sufficient to admit of the steamers being readily hauled upon the rails. It might be carried into deep water at an inclination of one foot in 40 or 50—and a truck upon wheels sent down it so as to be brought beneath the floating vessel. This truck must be cradle-shaped, and so constructed as to receive the shoulders of the vessel, and thus afford her adequate support when she rides high and dry. By means of a stationary engine, both the vessel and the truck must then be drawn up the incline, so that the first sinking upon the second, will be raised upon the railway along which it is to travel. The locomotive engine required to draw a laden vessel of 800 tons burden across the desert of S., need not possess above three times the power of those ordinarily used upon an English railway; and the increased disposable breadth for the machinery will render this power one of easy acquisition. The masts of the vessel must be so constructed as to fold over and lie flat during the transit. In order to prevent any action of the wind upon them; and a moderate width between the rails will then be found sufficient. A station, to admit of vessels on their trucks passing each other midway, must be constructed in the centre of the line; and, as the entire distance of 84 m. could be accomplished in 6 hours, communication between Suez and Cairo might be daily held each way upon a single line of rails. Although constructed for steam-vessel trucks, these rails could be equally employed for the transit of mails, passengers, heavy baggage, and coals, by the adaptation of locomotive engines possessing only the ordinary power, with a train of carriages and trucks of the requisite breadth. The expense that would attend the construction of such a railroad, with inclined planes, stationary, and locomotive engines, carriages, and trucks, may be estimated within £1,000,000. This sum falls very far short of the lowest estimate that has been framed for a ship canal, and it may appear a small sum for so long a line as that in contemplation; but it should be borne in mind, that the ground has not to be purchased, that there are neither bridges, nor tunnels to construct—both of which are among the heaviest items of an English railway—and that only one line of rails will be required."

SUFEID-KOH, or WHITE MOUNTAIN, a range of mountains in Afghanistan, running W from Attock



in a nearly direct line along the parallel of  $33^{\circ} 50'$  N lat., and terminating westward in E long.  $69^{\circ} 36'$ , where it spreads into a number of low hills. Its highest summit, which lies between  $69^{\circ} 40'$  and  $70^{\circ} 30'$  E long., has an alt. of 14,100 ft. above sea-level, and is covered with perpetual snow. It gives rise to several streams which flow into the Cabul. It is connected by the Khyber mountains on the E, and the Kurkutch on the W, with the Himalayas.

**SUFFERN**, a village of Rockland co., in the state of New York, U. S., at the junction of the Erie and Union railroads, and 112 m. S by W of Albany.

**SUFFIELD**, a township of Hartford co., in the state of Connecticut, U. S., on the W side of Connecticut river, bounded on the N by the state of Massachusetts, and 16 m. N of Hartford. The surface is diversified, and the soil chiefly deep loam. Pop. in 1840, 2,669; in 1850, 2,962.—Also a township of Portage co., in the state of Ohio, 108 m. NE of Columbus, and drained by branches of Cuyahoga river. Pop. in 1840, 1,212; in 1850, 1,275.

**SUFFIELD**, a parish in Norfolk,  $3\frac{1}{2}$  m. WNW of North Walsham. Area 1,458 acres. Pop. 237.

**SUFFIELD-WITH-EVERLEY**, a township in the p. of Hackness, Yorkshire,  $4\frac{1}{2}$  m. WNW of Scarborough. Area 1,910 acres. Pop. in 1851, 146.

**SUFFIN-JO-VHAN**, a village of Sind, on the l. bank of the Indus, near the road from Bukkur to Hyderabad, 15 m. NNE of Sehwan.

**SUFFOLK**, a maritime eastern county of England; bounded on the N by Norfolk, from which it is divided by the Little Ouse to the W, and the Waveney to the E; on the E by the German ocean; on the S by Essex, from which it is divided by the Stour; and on the W by Cambridgeshire. It is nearly a crescent in form, with its concave outline, to the N, produced by the Little Ouse running westward, and the Waveney eastward, from the middle of the outline. Its extreme length from E to W is about 50 m.; extreme breadth from N to S, 30 m.; length of sea-coast, 50 m. Its area is estimated at 1,515 sq. m., or 969,600 acres.

*Climate, soil, and aspect.* The climate is considered one of the driest in England; but in winter the cold and frost are severe, and in spring sharp NE winds are prevalent. The soil is very various, passing from the heaviest clay, through strong and fertile loams, to the lightest sand. The whole of the maritime district, except between the rivers Orwell and Stour, is sandy. The interior of the co. is a strong fertile loam; and a tract spreading between the Orwell and the Stour, is also loam of a rich description. Of the whole surface of this co., about 46,000 acres are rich loam; 80,000 marsh and fen land; and 450,000 heavy loam or clay, which may be said to give the character to Suffolk farming. The sandy soils amount to 250,000 acres. The co. in general presents a level surface, with few considerable elevations. The highest land is towards the W; through which, some miles to the W of Bury, and thence to Thetford, runs the chalk-ridge which traverses this part of England in a NE direction. The coast chiefly consists of long lines of cliff, which is being continually washed away by the action of the waves. What woodland there is may be traced from the NE to the NW side of the co.; but S. is not a richly wooded district.

*Rivers.* The courses of the Little Ouse and the Waveney, bordering with Norfolk on the N, are described under that article. The Stour, though it principally bounds the co. on the S, derives its waters mainly from its Suffolk tributaries. It crosses the SW corner of the co., where it also rises and runs SE past Sudbury and Bury-St.-Mary's, and then E by Neyland and Stratford, to its estuary as

far as Harwich in Essex, where it simultaneously unites with the waters of the Orwell and the German ocean.—The Orwell, the principal or most central river in the co., and that on which its capital stands, rises under the name of the Gippen, a few miles N of Stow-market, at Broad-green, near the centre of the co., and, flowing SE by Stow-market to Ipswich, now under the usual name of the Stow-market canal, assumes at Ipswich the name of the Orwell, and immediately becomes a broad navigable river, or narrow estuary, communicating with the German ocean at Harwich. See article IPSWICH.—The Deben, the next river in rank, also partakes of the nature of an estuary in the lower part of its course. It rises near Aspal above Debenham, and runs SE to Wickham-market: here, turning to the SSW, it passes the town of Woodbridge, where it widens and runs SE to the German ocean, about 4 m. NE of Languard fort, and the efflux of the rivers Orwell and Stour.—The Alde, further to the NE, rises near Framlingham, widens considerably a few miles farther on to the SE, and passing Orford, falls into the sea after a SW course, nearly parallel to the bend of the coast, leaving a long narrow peninsula of gravel between its waters and the German ocean; before flowing into which, however, it is joined by the Butley, which is similarly widened, though very short in its course.—The Blythe rises near Laxfield in the NE part of the co.; passes near Halesworth; and then flows, as a navigable stream, in nearly an E direction towards Southwold, to the S of which it enters the German ocean.—The Larke, a tributary to the Great Ouse, rises in the SW district of the co. by several feeders; flows N by Bury-St.-Edmunds; and continues its course in a NW direction till it falls into the Ouse, a few miles below Ely. In 1700 this river was made navigable to Bury.—The Bret, a tributary to the Stour, rises near Brethtenham, passes S to Hadleigh, and after a short course, falls into the Stour at Stratford.—A small stream from the Waveney, in the NE corner of the co., supplies Lake Lothing, and communicates with the sea at Lowestoft.—The smaller streams are very numerous.—Besides the natural navigation of the Waveney to Bungay; the Little Ouse to Thetford; the Stour to Sudbury for barges; the Orwell to Ipswich; the Deben to Woodbridge; the Alde to above Aldborough; the Blythe to Halesworth; and the Larke to Bury-St.-Edmunds; the only other inland navigation, is the Stow-market canal, 16 m. in length, on the Gippen; and the Lowestoft and Norwich navigation, which enables sea-borne vessels of 200 tons burden to enter from the German ocean, by Lowestoft and Mutford-bridge, through Lake Lothing and the Waveney to Beccles, a distance of 15 m., forming a branch of the canal communication with Norwich.

*Agriculture.* S. is one of the most skilfully tilled and most productive cos. in England. The district is almost entirely agricultural, and arable husbandry is now principally pursued; but great attention is likewise paid to the management of the dairy and the rearing of sheep. Hops are cultivated; and hemp is raised in a district about 10 m. in breadth, extending in length from Eye to Beccles, along the valley of the Waveney. The dairy produce consists chiefly of excellent butter. The S. cows are celebrated for the large quantities of milk they yield; they are small, and without horns. The sheep, which are fed here in great numbers, are chiefly of the Norfolk breed, except where changed of late for that of the South-Down. The Suffolk horses are celebrated for agricultural purposes, and for draught in general. Hogs and poultry are abundant; and turkeys are reared here in nearly as large quantities

as in Norfolk. Pigeons are bred in great quantities in the open fields in the western district; in the sandy parts of which there are numerous rabbit-warrens. Farms on the heavy clay soils vary from 30 to 300 acres in extent; on the light lands, from 300 to 1,500 acres. The annual value of the agricultural produce of the co. has been estimated at £1,750,000. There is no mineral produce of any kind but chalk. In 1770, S. was still a seat of the woollen manufacture; many farmers had, however, to carry their corn 25 m. to market, a disadvantage to which few farmers are at present subject. By 1804, the dairies of S. had greatly decreased, and the high prices of corn and meat of the succeeding years caused pasture to be rapidly broken up; and when, in 1819, prices became much depressed, fresh conversions of pasture into arable land were consented to by the landowners, instead of reducing rents: at this time, therefore, S. is an arable co. For its makers of agricultural implements, S. has long been famous, and, with perhaps the single exception of thrashing machines, its machine makers stand unrivalled. Before 1804, 40,000 firkins of butter were annually sent from the dairy district of S. to London, besides great quantities weekly sent to Yarmouth and Norwich; and great droves of calves were sent weekly to Colchester, to be sold as sucklers; now the co. is supplied with most of its butter, cheese, and calves by importation.

**Roads and railways.]** The principal road is that which enters the county by the Stour at Stratford, and runs to Ipswich, whence one branch proceeds to Lowestoft and Yarmouth, and another by Yaxley to Norwich. The Eastern Counties line of railway enters from Essex by crossing the Stour near Stratford, and runs N by Ipswich and Eye, quitting S. for Norfolk by crossing the Little Ouse at Scole near Diss.

**Divisions, Statistics, &c.]** The co. is divided into 22 hundreds, 13 of which are in the eastern parliamentary division; and 9 in the western parliamentary division. It is farther subdivided into 480 parishes, containing 3 parliamentary boroughs, viz.: Ipswich, Eye, and Bury; and 24 other market-towns, some of which are municipal boroughs, viz.: Aldborough, Beccles, Bildeston, Brandon, Botesdale, Bungay, Clare, Debenham, Dunwich, Framlingham, Hadley, Haverhill, Ixworth, Lavenham, Lowestoft, Mendlesham, Mildenhall, Needham, Neyland, Saxmundham, Southwold, Stow-market, and Woodbridge.—The pop. of this co. in 1801, amounted to 210,431; in 1831, to 296,317; in 1841, to 315,129; in 1851, to 337,215. Previous to the passing of the Reform act, 2 members were returned for the shire, and 2 each for Ipswich, Orford, Aldborough, Dunwich, Eye, Sudbury, and Bury-St.-Edmunds. The co. now returns 4 members,—2 for the E division, and 2 for the W division. Orford, Aldborough, and Dunwich, were disfranchised by the Reform act. The number of electors registered for the co., in 1837, was for the E division 6,278; for the W, 4,950. In 1852, the electors registered for the E division were 6,343; for the W, 4,379. S. is included in the Norfolk circuit. The assizes are held at Bury-St.-Edmunds, except the summer assizes, which are now held at Ipswich. There are county jails both at Ipswich and at Bury.—S. is chiefly in the dio. of Norwich and prov. of Canterbury, constituting two archdeaconries, Suffolk and Sudbury, in this diocese. Part of Sudbury, however, consisting of the deaneries of Fordham, Clare, and Thingoe, has been recently subtracted to the dio. of Ely.—The poor-rate returns for 3 years, to Easter, 1750, show an average expenditure of £28,063 on the poor of this co. In 1840, the expenditure was £141,536; in the half-year ending Michaelmas 1852, £49,790. The number of criminals in each 100,000 of the pop. of the co. in 1801 was, according to Mr. Plint, 51, while

that for all England was 54; in 1848, 151, while that for all England was 177.

**History.]** At the period of the Roman invasion this co. formed part of the territory inhabited by the Icenii. Under the Roman dominion it was included in *Flavia Caesariensis*. The relative position of this co. procured for its inhabitants the name of 'Southfolk,' in contradistinction from their neighbours in the north, who were called 'Northfolk,' whence the names of the two counties. Ipswich, in 1155, was besieged and taken by King Stephen. In 1267, the insurgent barons having taken post in the Isle of Ely, Henry III. chose Bury in Suffolk as the place of rendezvous for his forces. Many of the Suffolk men, during the rebellion of Wat Tyler, joined the Norfolk insurgents in their formidable revolt. On the death of Edward VI., the inhabitants of Suffolk were particularly zealous in support of the Princess Mary, in opposition to the adherents of Lady Jane Gray. Queen Elizabeth, in 1561, made one of her imposing progresses through this co., preceded by a magnificent cavalcade, at the head of which was the high sheriff. In the great civil war this was one of the eastern counties associated on behalf of the parliament, and placed under the command of the Earl of Manchester.

**SUFFOLK**, a county in the E part of the state of Massachusetts, U. S., comprising Boston and Chelsea, and several small islands, and containing an area of 109 sq. m. It has a generally level surface, drained by Charles and other rivers, and is intersected by the Eastern, the Boston and Maine, the Norfolk county, the Boston and Lowell, the Fitchburg, the Boston and Worcester, the Boston and Providence, the old colony, the Grand Junction, and other railroads. Pop. in 1840, 95,773; in 1850, 142,507. Its capital is Boston.—Also a county of the state of New York, comprising an area of 976 sq. m., containing the E portion of Long Island, Fisher's Shelter, Gardener's, and other islands. It is in some parts hilly, and contains extensive salt meadows. Pop. in 1840, 32,469; in 1850, 36,922. Its capital, which bears the same name, is on Long Island railroad, and 43 m. from New York.—Also a village of Nansemond county, in the state of Virginia, on Nansemond river, and intersected by the Seaboard and Roanoke, and the Petersburg and Norfolk railroads, and 72 m. SE by S of Richmond. Pop. in 1840, 1,500; in 1850, 1,700.

**SUFTI**, a town of Spain, in the prov. and 33 m. NNE of Almeria, and partido of Purchena, in a fertile locality. Pop. 1,150. It has manufactories of linen and coarse cloth. Gypsum is quarried in the environs.

**SUGACHI**, a river of Ecuador, in the dep. of Assuay and prov. of Cuenca, which has its source in N lat. 3°, and W long. 77° 15'; runs SE, and after a course of about 90 m., joins the Pastaza on the R. bank.

**SUGAR-CREEK**, a township of Armstrong co., in the state of Pennsylvania, U. S. Pop. in 1840, 1,852.—Also a township of Venango co., in the same state, 8 m. NW of Franklin, bounded on the NE and E by a creek of the same name. The surface is level, and the soil chiefly a fertile loam. Pop. 1,093.—Also a township of Greene co., in the state of Ohio. Pop. 2,369.—Also a township of Putnam co., in the same state, 35 m. SE of De fiance. Pop. 500.—Also a township of Stark co., in the same state. Pop. 1,862.—Also a township of Wayne co., in the same state. Pop. 2,223.—Also a township of Tascaraaw co., in the same state. Pop. 1,450.—Also a village of Hancock co., in the state of Indiana, on the N bank of a stream of the same name, and 15 m. E of Indianapolis. Pop. 610.—Also a township of Montgomery co., in the same state. Pop. 650.—Also a township of Walworth co., in the state of Wisconsin, 47 m. SE of Madison, drained by branches of Fox river. The surface is level, and the soil extremely fertile. Pop. in 1850, 1,229.

**SUGAR-GROVE**, a township of Warren co., in the state of Pennsylvania, U. S., 173 m. NW of



Harrisburg, drained by Jackson's run, Stillwater creek, and other tributaries of Conewango creek. Pop. in 1840, 1,062.

**SUGAR-ISLAND**, an island in St. Mary's strait, between Lakes Superior and Huron. It is long and narrow, and curving towards the N encloses an extensive basin.

**SUGAR-LOAF**, a hill of New South Wales, in the p. of Menangle and co. of Cumberland.—Also a town in the co. of Northumberland, at the junction of a creek of the same name, with Wollombi brook, 92 m. from Sydney.—Also a headland in the co. of Gloucester, near the N end of Myall lake, and to the N of Port Stephens, 220 m. from Sydney.

**SUGAR-LOAF**, a township of Lucerne co., in the state of Pennsylvania, U. S. It has a mountainous surface, and is drained by Nescopuh and Black creeks. Pop. in 1840, 1,306.—Also a township of Carrol co., in the state of Arkansas. Pop. 140.—Also a township of Marion co., in the same state. Pop. 143.—Also a village of Goshen and Warwick townships, Orange co., in the state of New York, 105 m. SSW of Albany. Pop. 140.—Also a mountain of Frederick co., in the state of Maryland, near Monocacy river.

**SUGENHEIM**, or **SUGGENHEIM**, a town of Bavaria, in the circle of Middle Franconia, capital of a seignory belonging to the barons of Seckendorf, in the presidial and 3 m. SSE of Markt-Bober, near the l. bank of a small affluent of the Ehe. Pop. 650, of whom a large proportion are Jews.

**SUGGSVILLE**, a village of Clark co., in the state of Alabama, U. S., 152 m. S of Tuscaloosa, on the E side of Bassett's creek. Pop. in 1850, 200.

**SUGHUT**, **SOGHAT**, or **SHUGHUT**, a town of Turkey in Asia, in Anatolia, in the sanj. of Sultan Oghi, 30 m. NNW of Eski-Shehr, and near the l. bank of the Sakaria. The houses, which are constructed of wood, are covered with red tiles. It is noted for its comfits. This town, according to some authorities, occupies the site of the ancient *Cotyrium*, by others that of *Tottarium*. It was the residence of Othman the founder of the Turkish empire.

**SUGNAL-MAGNA**, a township in the p. of Eccleshall, Stafford,  $2\frac{1}{2}$  m. WNW of Eccleshall. Pop. in 1841, 148.

**SUGNY**, a department and commune of Belgium, in the prov. of Luxemburg and arrond. of Neuf-chateau. Pop. of dep. 1,766; of com. 1,291.

**SUHA**, a village of Bambarra, in central Africa, near the Niger, 70 m. NE of Bammakn.

**SUH-CHU**, a district and town of China, in the prov. of Gan-hwuy, and div. of Fung-yang-fu, in N lat.  $33^{\circ} 43'$ , and E long.  $117^{\circ} 7'$ .—Also a district and town in the prov. of Shan-se, and div. of Suh-ping-fu, in N lat.  $39^{\circ} 25' 12''$ , and E long.  $112^{\circ} 27'$ , on the San-lan-ho, and 120 m. N of Tae-yuen-fu.—Also a town of the Corea, in the prov. of Ping-nan, on the l. bank of the Pa-lu, 30 m. from the shore of the Yellow sea.

**SUH-CHU-FU**, a division and town of China, in the prov. of Kan-suh. The div. comprises only one district. The town is 360 m. NW of Lan-chi-fu, and near the Great wall, in N lat.  $39^{\circ} 45' 40''$ , and E long.  $99^{\circ} 7'$ . It is divided into two towns, a Chinese and Mongolian, and is enclosed by extensive fortifications.

**SUHL**, or **SUELA**, a town of Prussia, in the prov. of Saxony, regency and 31 m. SW of Erfurt, and circle of Sehler-singen, on the Lauter or Aue, at the foot of the Thüringer-Wald. Pop. in 1843, 8,127. It is well-built, and has three churches, a school, a poor's and a work-house. It has extensive manufactures of fire-arms, ironmongery, fustian, and nu-

merous flour, tan, oil, and saw-mills. In the vicinity are mines of iron.

**SUHLAN**, a village of Prussia, in Silesia, in the circle of Breslau. Pop. 800. It has manufactories of cloth, linen, and tobacco.

**SUHLINGEN**, a market-town of Hanover, in the upper co. of Hoya, bail. and 7 m. SE of Ehrenburg. Pop. 1,200.

**SUH-NING**, a district and town of China, in the prov. of Chih-le, and div. of Ho-keñ-fu, in N lat.  $38^{\circ} 30'$ , and E long.  $115^{\circ} 54'$ .

**SUH-PING-FU**, a division and town of China, in the prov. of Shan-se. The division comprises five districts. The town is in N lat.  $40^{\circ} 12'$ , and E long.  $112^{\circ} 13'$ . It bears also the name of Yeou-yu.

**SUHR**, a circle and village of Switzerland, in the cant. of Aargau, district and 3 m. SE of Anrau, on the l. bank of the Sur. Pop. 1,423.

**SUH-SUNG**, a district and town of China, in the prov. of Gan-hwuy and div. of Gan-king-fu, in N lat.  $30^{\circ} 16'$ , and E long.  $116^{\circ} 10'$ .

**SUH-TSEEN**, a district and town of China, in the prov. of Keang-su, and div. of Sen-chu-fu, in N lat.  $34^{\circ} 0' 50''$ , and E long.  $118^{\circ} 31' 21''$ .

**SUIPPES**, or **SURPPES - LA-LONGUE**, a canton, commune, and town of France, in the dep. of the Marne, and arrond. of Chalons. The cant. comprises 16 com. Pop. in 1831, 7,028; in 1846, 7,875. The town is 15 m. ENE of Chalons, on a river of the same name, which, after a course in a generally NW direction of 39 m., throws itself into the Aisne. It has extensive manufactories of coarse woollen fabrics, several yarn-mills, dye-works, and tanneries.

**SUIR**, a river of Ireland, which rises in the Slieve-Bloom mountains, in the N extremity of Tipperary; flows S, passing Golden-bridge and Cahir; turns N, then E, and then ESE, passing Clonmel and Carrick; and, after a course of about 80 m., unites with the Barrow, and forms the estuary known as Waterford-harbour. The principal affluents of the S. upon its l. bank, are the Black river above Thurles, the Honor between Clonmel and Carrick-on-Suir, the Leenane  $1\frac{1}{2}$  m. below Carrick-on-Suir, the Pill,  $1\frac{1}{2}$  m. below the influx of the Leenane, the Black-water 2 m. above Waterford, and the Barrow at the junction-point of the eos. of Waterford, Kilkenny, and Wexford,—the last competing with the S. in both length and volume, and considerably excelling it in commercial importance. See BARROW. The principal affluents on the l. bank, are the Clodagh between Holycross and Golden-bridge, the Aherlow a little above Cahir, the Tar  $1\frac{1}{2}$  m. above the first point of contact with co. Waterford, the Nier at the first point of contact with co. Waterford, the Clodagh  $5\frac{1}{2}$  m. below Carrick-on-Suir, and the St. John's at the city of Waterford. Vessels of nearly 800 tons sail up to the quay of Waterford; and vessels of 120 tons are navigated up to Carrick-on-Suir.

**SUISUN**, a village of Solano co., in the state of California, U. S., on the W bank of the Sacramento river, about 80 m. from San Francisco, and at an equal distance from Sacramento. It is situated in a salubrious locality, and is well laid out.—Also an arm of San Francisco bay, connected with an expansion of the San Francisco river, and by a delta 25 m. in length with the valleys of San Joaquin and Sacramento. It is enclosed by hills, and affords anchorage for vessels of the largest size.—Also a valley to the N of the above-named bay, opening on the E into Sacramento valley. It comprises an area of about 6 m. and is remarkable for its fertility.

**SUJUK-KALEH**, a village and fortress on the Circassian coast of the Black sea, on the W coast

of the bay of Tsemese, 25 m. direct distance SSE of Anapa, and  $2\frac{1}{2}$  m. NNW of Sujuk-point. The bay is finely surrounded by lofty mountains, but its bottom is rocky, and it is exposed to the *bora* or NE wind, which is prevalent from September to April. The village is called *Temess* by the Circassians, and *Novorussk* by the Russians.

**SUKAID**, or **SUKHET**, a town of Hindostan, capital of a territory of the same name, in the prov. of Lahore, on an affluent of the Sutlej, 20 m. NE of Belaspur.

**SUKHUM-KALEH**, a fort and village on the Circassian coast of the Black sea, at the mouth of the Basla, in N lat.  $43^{\circ}$  E long.  $41^{\circ}$ . The bay, between Cape S. on the W, and Cape Kolasur on the E, offers a good roadstead.

**SUKI**, **SUKAI**, or **SOUKENI**, a town of Turkey in Asia, in Anatolia, in the sanj. of Aidin, 12 m. SE of Scala-Nova, on a small affluent of the Buuk-Mendere. It is governed by an aga.

**SUKKERTOPPEN** (*NEU*), a Danish colony of West Greenland, to the N of the district of Godthaab. It has a good port.

**SUKKOT**, a district of Nubia, extending along the Nile, between the territory of Bahr-el-Hadjar on the N, and that of Manass on the S. It is fertile and picturesque, and the Nile, which here flows tranquilly, presents a breadth equal to that in Egypt, and contains the island of Say. Its r. bank is finely wooded, and is studded with villages. The hippopotamus is common in the locality.

**SUKKUR**, a town of Sind, on the r. bank of the Indus, in N lat.  $27^{\circ} 44'$ , opposite the fortress of Bukkur and the town of Rori. The place had fallen into decadence, but the recent establishment of a great annual fair here by the government will probably work a speedy revival. The current of trade that ascends and descends the Indus crosses at this point the native routes from Malwah and Delhi to Beluchistan and Candahar.

**SUKYT**, a small town of the Punjab, in the valley of Sukyt-Mundi, nearly midway between the Beas and Sutledge. The valley is about 10 m. in length, and from 3 to 4 m. in breadth, and is watered by the Sukyt, an affluent of the Beas. It is fertile.

**SULANGA**. See *MINDANAO*.

**SULA-TIND**, a craggy isolated mountain of Norway, the highest peak of that part of the great central chain known by the name of the Fille-fjeld. It has an alt. of 5,840 ft. above sea-level, and commands a prospect of extreme grandeur in every direction, which has been thus described by a party who ascended it in July 1851: "Vast sheets of snow covered the great plateau of the fjeld, 1,500 or 2,000 ft. beneath us, from which streams and rivers started into existence, and poured their foaming waters into the distant glens below; strangely contrasting with the deep solemnity of their music was the occasional croak of some solitary raven, or the whirr of a flock of ptarmigan, as they rose from the rocks. In front, the dark crags of Odde-berg stood before us; and far beyond, the snowy Jokulen stretched its white summit towards the western horizon. To the E, also, ranges of snowy mountains rose one over the other, till lost in extreme distance; whilst frozen lakes of varied form lay half-buried in the hollows amongst them. Yet, far exceeding all these in grandeur, were the spiked and dome-like peaks of the Hurungen, the loftiest of the Norwegian mountains, which towered to the northward, even above the dark wreaths of cloud still clustering round them."

**SULAU**, **SULIAU**, or **ZULAUF**, a town of Prussia, in the prov. of Silesia, regency and 29 m. NNE of Breslau, and circle of Melitsch, near a small lake

formed by the Bartsch, and on the r. bank of that river. It is the capital of a seignory belonging to the house of Burghaus. Pop. in 1843, 709.

**SULBECK**, a village of Hanover, in the gov. of Hildesheim, principality of Grubenhagen, bail. and 2 m. S of Salzderhelden, in a valley watered by a small affluent of the Leine, between a mountain of the same name on the N, and that of Drüber on the S. Pop. 400. It has a salt-work.—Also a village of the principality of Schauenburg-Lippe, bail. and 6 m. NE of Bückeburg. It has a coal mine.

**SULEDAL**, a parish of Norway, in the diocese and 114 m. NNW of Christiansand, and bail. of Stavenger, at the SW extremity of a lake of the same name, at the egress of the Suledal-åv, an affluent of the Sand-fiord. Pop. 2,500. Lake Suledal is 15 m. in length, but is very narrow.

**SULEJOW**, a town of Poland, in the gov. of Kalisch, obwod and 6 m. SE of Petrikau, on the Pilica. Pop. 1,210.

**SULGEN**, a parish and village of Switzerland, in the cant. of Thurgau, bail. and 3 m. NW of Bischofszell. Pop. of p. 3,212, of whom 330 are Catholics.

**SULGRAVE**, a parish in Northamptonshire, 14 m. SW of Northampton. Area 4,100 acres. Pop. in 1831, 576; in 1851, 576.

**SULHAM**, a parish in Berks,  $4\frac{1}{2}$  m. W by N of Reading, watered by a branch of the Thames. Area 695 acres. Pop. in 1831, 72; in 1851, 132.

**SULHAMSTEAD-ABBOTS**, a parish in Berks, 6 m. SW of Reading. Area, with S. Bannister, 2,951 acres. Pop. in 1831, 423; in 1851, 382.

**SULHAMSTEAD-BANNISTER**, a parish in Berks,  $5\frac{1}{2}$  m. WSW of Reading, watered by the Kennet. Pop. in 1831, 289; in 1851, 302.

**SULKEA**, or **SOLKEE**, a town of Hindostan, in the presidency and prov. of Bengal, on the N bank of the Hugli, opposite Calcutta.

**SULI**, **SULI**, or **SULLI**, a district of Albania to the N of Porto-Phanari, 40 m. from Janina, and about 20 m. from Santa-Maura. It consists of a large valley enclosed by almost inaccessible mountains, and the only entrance to which, a defile on the S, is defended by three towers nearly 1 m. distant from each other. This territory, about 26 m. long from N to S, and 8 m. in breadth, is inhabited by a tribe of Greeks who long maintained themselves in the form of an independent republic. It contained 18 villages, of which 5 were situated in the southern and less difficult part of the valley towards Louro, and 13 in the upper part. The principal villages are Mega-Suli, the capital, Navarikos, and Kiapha. On the S, the valley is bounded by the Chimara mountains. The population of this independent tribe was, in 1803, about 10,000. Their wars, particularly between 1786 and 1803, were remarkable for the courage and pertinacity which they displayed. In vain did Ali Pasha attack them in 1792 with a powerful army. He was repulsed, as well in that year as subsequently; and it was not until 1803 that he definitively succeeded. On the loss of their independence, the Suliotes of the 4 villages which had taken a leading part against the pasha left their country, and took service in Russia and France. The present inhabitants of the Lakka, or plateau of the S. range, are Albanians of the Tzami tribe, who, having been forced by the advancing Turks to fly from the lowlands and the plain of Janina, took refuge in the inaccessible wilderness of these mountains, and, by industry and perseverance, succeeded in making them habitable. But many of the old Suliote families who had emigrated to Greece still keep up a kind of connexion with their ancient home, which they consider as



their true country, and these families, besides the priests, exerted all their influence to induce the Suliotes to rise in the recent revolutionary movements in Epirus and Thessaly, instigated by the court of Greece at the dictation of the czar of Russia. At the beginning of the outbreak all the bodies of Greeks which went into those parts were headed by emigrated Suliote chiefs. They, however, found but an indifferent reception; the mass of the people was not only not with, but decidedly against them, and showed by a kind of passive inertness that all the fine promises had been lost on them, and that the Turkish rule was, after all, not quite so insupportable as to make them willing to risk something for a change. This feeling grew by degrees into a positive dislike when the people saw the excesses which were committed by their friends against ally as well as against foe. The only supporters which the Greek invaders found among the Suliotes were a few youths, who, intoxicated with raki and hope, and allured by the debauchery in which they could with impunity indulge, made common cause with the Greeks.

**SULIA**, or **ZULIA**, a river of South America, which issues from a small lake in the S. part of the prov. of Pamplona in New Granada; flows N past the town of that name; enters the state of Venezuela; traverses the prov. of Merida; and, after a total course of about 195 m., throws itself by three embouchures into the SW part of Lake Maracaybo. Its principal affluents are on the r. the Rio-del-Oro, and La Grita, and on the l. the Catacumbo. — Also a dep. of Venezuela, bounded on the N by the Caribbean sea; on the E by the prov. of Apure; and on the S and W by New Granada. It comprises an area 390 m. in length from N to S, and 300 m. in breadth, and derives its name from the S. by which it is watered in the S. Its coasts present great irregularities, and contain several remarkable bays. Of these the principal are the gulfs of Coro and Maracaybo or Venezuela, and the immense inlet or lake of Maracaybo, which extends into the centre of the dep., and forms the receptacle of nearly all the streams which descend from the surrounding mountains. Its principal headlands are Cape S. Roman, at the N extremity of the peninsula of Paraguana, Points Arenas and Payjana, at the N extremity to the entrance to Lake Maracaybo and Point Espada. Its principal rivers are the Sulia, the Chama, and the Motatan. The dep. comprises 4 provs., viz. Coro, Maracaybo, Merida, and Truxillo. Pop. 162,000. Its chief place is Maracaybo.

**SULIAC (SAINT)**, a commune of France, in the dep. of the Ille-et-Vilaine, and cant. and 2 m. W of Chateaufort, near the r. bank of the Rance. Pop. 1,753. It has a custom-house and a port, and carries on an active trade in rosin, fish, especially herring, limestone, gypsum, planks, slate, grain, timber, cider, honey, and cheese. The port consists of a creek, in which vessels can ride at low water.

**SULIAGO**. See **SURIGAO**.

**SULIAGO**, an island in the Pacific, about 20 m. in circumf., 20 m. distance from the NE coast of Mindanao. It gives its name to a cluster.

**SULIAGO**, or **SURIAGO**, a town on the N coast of the island of Mindanao, in a bay between two projecting capes, in N lat. 9° 45'.

**SULIMAN MOUNTAINS**, a range in Afghanistan, extending from the 29th to the 34th parallel, nearly along the meridian of 70° E. Their geological composition is principally sandstone and limestone. See article **AFGHANISTAN**.

**SULINA**, a village of Bessarabia, on an island near the mouth of the Sulina deltoid arm of the Danube. It is or was composed, in the winter of 1853, of

"a double row of one-storied wooden houses, straggling along the river-side, with a dreary marsh behind them. Most of the houses are built upon piles, in the midst of pools of putrid water, which oozes out from the neighbouring marsh. The place," Mr. O'Brien goes on to say, "is reeking with fevers in the summer months, and is almost uninhabitable from the cold in winter. Pilots, fishermen, tavern-keepers, and lightermen, with a few Russian soldiers and a Greek priest or two, form the pop. I counted more than 200 vessels of different sizes at anchor in the river: some had been there for three months, unable to get over the bar! Almost every attempt to get to sea had proved fatal since the beginning of the month of June; and all efforts to cut a channel through the bar appear to have been abandoned." The town was burnt in 1854 by an English detachment, that it might not afford cover to the Cossacks. The lighthouse, a very fine stone structure, and the church, a wooden building, were the only edifices left standing. According to the treaty of Adrianople, the island of St. George, on which S. is built, as well as the other islands of the Danube, ought to be uninhabited. The Russians, however, built a quarantine station at the SE point of Lati island, and raised the little town of S., of which they constituted themselves the masters. At the opposite point of St. George's island, at the entrance of the channel, the Russians have also built a quarantine station. The rest of the island of St. George is a desolate swamp. "Independent of other causes," says Mr. O'Brien, "the lowness of the water over the bar, at the mouth of the Danube, since last June, would have been sufficient to stagnate the commerce of Ibraila and Galatz; and yet it seems to me, that with a little good will on all sides, nothing would be easier than to keep a passage open through the bar of from 14 to 16 ft. deep." The British consul at Galatz reported in 1850, that while the Turks had possession of this mouth of the Danube, they kept the water on the bar at 14 ft., and even 16½ ft. The current in the S. mouth is very strong; running at least 5 knots an hour; all, therefore, that is required, would be to rake up the sand, of which the bar is composed, and the force of the current would carry it away. A dredging-vessel constructed with rakes, and not buckets, would easily effect this. Driving piles on either side would, of course, keep the channel permanently open; but without going to this expense, the dredging-vessel properly worked, could make a safe passage for ships, drawing even 12 ft. of water, during the summer months." In 1840, Russia entered into a convention with Austria, by which the first-named power undertook to keep the mouth of the river free, upon condition that all ships entering it should pay a tax. The tax was duly levied, and fell heavily upon British shipping, but the duty was not performed. When the same entrance was in the possession of Turkey, every vessel leaving the river was compelled to drag a large rake behind her; the rake stirred up the mud, and the mud was carried away by the force of the current; but, under Russian regime, all vessels were prohibited from doing anything of the kind. In this way Russia manages to shut up the resources of one of the richest countries of the world from the rest of Europe, and to nullify the value of one of the most magnificent streams of the continent. The interest that England has in putting an end to this state of things is evident. "There is no country more deeply interested in rendering the Danube navigable at its mouth than England, and it is England alone that has shown a sincere and constant desire to effect that object. In 1851, the exports from Ibraila by sea amounted to

£778,157, and its imports up the Danube to £334,078. The exports from Galatz by sea in the same year amounted to £496,368, and the imports up the Danube to £374,233; making in all a sum for imports and exports of £1,982,836. In June 1853, vessels outward bound, which had lightened to 10 ft. water, and had been during the contrary wind accumulating at S., waiting for the first change of wind to go out, found themselves unable to proceed, all the lighters being engaged. There had been 10 ft. water as usual on the bar, but the wind being easterly, vessels accumulated at S., and on a change of wind there was found to be but 8 ft. water. As the wind shifted to the W. the bar was tolerably smooth, but there was only 8½ ft. upon it; while the river was crowded for a couple of miles with outward bound vessels, about 25 English vessels in the number. The objects aimed at by Russia in these dishonest proceedings were partly political, partly commercial; to obtain control over the trade and administration of the Danubian provinces, and to promote the trade of Odessa at the expense of Hungary, Wallachia, Moldavia, and Bulgaria, countries producing the same articles as the southern province of Russia. At the present moment, the allied forces have established a fortified position at the mouth of the S., and, having removed the obstacles which the Russians had placed in the mouth of the river, are employing dredging-machines to deepen the channel. See article DANUBE.

**SULINGEN.** See **SÜHLINGEN**.

**SULISKER**, a small insulated rock of the Hebrides, lying 4 leagues E of the island of Rona, and 13 leagues NW of the Butt of Lewis.

**SULLANE**, a rivulet of co. Cork, which rises among the Derrynasaggart mountains, and runs 10½ m. E to Macroom, and 1½ m. S to a confluence with the Lee.

**SULLINGTON**, a parish of Sussex, 5½ m. WNW of Steyning. Area 2,340 acres. Pop. in 1851, 243.

**SULLIVAN**, a township of Hancock co., Maine, U. S., at the head of Frenchman's bay, 82 m. E by N of Augusta. Pop. in 1850, 810. —Also a township of Cheshire co., New Hampshire, 36 m. SW of Concord. Pop. 468. —Also a township of Jefferson co., in Wisconsin, 41 m. E by S of Madison. Pop. 872. —Also a county in the state of New York. Area 784 sq. m. Pop. in 1850, 25,088. Its cap. is Montecello. —Also a co. in the SW of Indiana. Area 430 sq. m. Pop. 10,141. —Also a co. in the N of Missouri. Area 637 sq. m. Pop. 2,983. Its cap. is Milan. —Also a co. of New Hampshire. Area 616 sq. m. Pop. in 1850, 19,375.

**SULLIVAN COVE**, a harbour about 9 m. from the mouth of Derwent river, in Van Diemen's Land, where a settlement was established in 1804.

**SULLIVAN MOUNTAINS**, a range in New Hampshire, U. S., extending from Cockburne to the White mountains.

**SULLIVAN POINT**, a cape on the W coast of an island in Chatham's strait, in N lat. 56° 38'.

**SULLIVAN'S ISLAND**, an island at the mouth of Ashley and Cooper rivers, 6 m. below Charleston, in S. Carolina, U. S. This island is much resorted to by the people of Charleston during the summer months.

**SULLY**, a parish of Glamorganshire, 5 m. from Cardiff. Area 2,167 acres. Pop. in 1851, 137.

**SULLY**, a town of France, in the dep. of Loiret, on the Loire, 21 m. SE of Orleans.

**SULMETINGEN** (Ufferr), a town of Würtemberg, the chief place of a domain belonging to the prince of Teur and Taxis. Pop. 1,000. —Near it is the village of Lower Sulmetingen.

**SULMIERSZYCE**, a town of Prussian Poland, 25 m. WSW of Kalisch. Pop. 1,400.

**SULMONA**, a town of Naples, in the Abruzzo-Ultra 2da, 21 m. SSW of Chieti. It is a place of antiquity, having been the birth-place of Ovid. In 1709 it was greatly injured by an earthquake. At present it contains 8,000 inhabitants, and is the see of a bishop. It has a superb cathedral.

**SULPHUR ISLAND**, an island in the N. Pacific ocean, in N lat. 24° 48', discovered by Captain Gore, in 1779. It is about 5 m. long from NNE to SSW. Its S point is a high barren hill, flattish at top, and when seen from WSW, presents an evident volcanic crater. —Also an island off the coast of the Japanese island of Kiusiu, in N lat. 30° 43'.

**SULPHUR MOUNTAIN.** See **GUADALOUPE**.

**SULPICE** (SAINT), a commune of France, in the dep. of the Charente, cant. and 6 m. NNW of Cognac, near the r. bank of the Antenne. Pop. 1,724. —Also a village in the dep. of the Lot, cant. and 7 m. WNW of Cajarc, in a deep and narrow valley, on the r. bank of the Sellé. Pop. 400. —Also a village of Switzerland, in the cant. and 18 m. SW of Neuchâtel, near the source of the Reuse. Pop. 420. It has several paper-mills and forges.

**SULPICE**, or **SULPICE-LEXADOIS** (SAINT), a commune and town of France, in the dep. of the Haute-Garonne, cant. and 6 m. NE of Carbone, near the l. bank of the Leze. Pop. 1,195. It has a tile-work. This town was formerly fortified, and a place of considerable importance.

**SULPICE-DES-CHAMPS** (SAINT), a canton and commune of France, in the dep. of the Creuse, and arrond. of Aubusson. The cant. comprises 9 coms. Pop. in 1831, 9,218; in 1846, 9,914. The village is 8 m. WNW of Aubusson, on a mountain. Pop. 1,145.

**SULPICE-LES-DOULENS** (SAINT), a hamlet of France, in the dep. of the Somme, cant. and near Doullens. It has a paper-mill.

**SULPICE-LE-DUNOIS** (SAINT), a commune of France, in the dep. of the Creuse, cant. and 4 m. E of Dun-le-Palleteau. Pop. 1,769.

**SULPICE-D'EXIDEUIL** (SAINT), a village of France, in the dep. of the Dordogne, cant. and 7 m. W of La Nouaille-d'Exideuil. Pop. 1,069. It has several iron-works.

**SULPICE-DE-FALERENS**, or **DE-SAINT-EMILION** (SAINT), a commune of France, in the dep. of the Gironde, cant. and 4 m. SE of Libourne, near the r. bank of the Dordogne. Pop. 1,267. It produces good wine.

**SULPICE-DE-FAVIERES** (SAINT), a village of France, in the dep. of the Seine-et-Oise, cant. and 8 m. E of Dourdan. Pop. 200. It contains a church of fine Gothic architecture and the Chateau-de-Segres.

**SULPICE-LES-FEUILLES** (SAINT), a canton and commune of France, in the dep. of the Haute-Vienne, and arrond. of Bellac. The cant. comprises 9 coms. Pop. in 1831, 9,218; in 1846, 9,914. The com. is 23 m. NE of Bellac, on the slope of a mountain, and on the r. bank of the Benaise. Pop. 1,783.

**SULPICE-DES-LANDES** (SAINT), a village of France, in the dep. of the Loire Inferieure, cant. and 5 m. N of St. Mars-de-la-Jaille. Pop. 900.

**SULPICE-DE-LA-POINTE** (SAINT), a commune and town of France, in the dep. of the Tarn, cant. and 9 m. NW of Lavaur, on the l. bank of the Agout, near its confluence with the Tarn. Pop. 1,403.

**SULPICE-LE-QUERETOIS** (SAINT), a commune and town of France, in the dep. of the Creuse, cant. and 4 m. E of Dun-le-Palleteau. Pop. 2,306.

**SULPICE-SUR-RILLE**, a commune of France,



in the dep. of the Orne, cant. and  $1\frac{1}{2}$  m. NE of Laigle, on the l. bank of the Rille. Pop. 1,267. It has extensive wire-mills.

**SULTAN-AGHI**, a sanjak of Turkey in Asia, in Anatolia, bounded on the N by the sanj. of Boli; on the E by that of Angora; on the S by the sanjaks of Karahissar and Kutaya; on the W by the sanj. of Khodovenkiar; and on the NW by that of Kodja-Hi. It is intersected on the N by the Aladagh, and on the W by the Tumandjidagh, and is covered by numerous ramifications of these chains. Except the Sakaria by which it is intersected in a WNW direction, this sanj. contains no river of importance. The valleys are generally fertile, producing grain, wine, and fruit. Its chief place is Eski-Shehr. This sanj. occupies the W part of the ancient Phrygia.

**SULTANGUNGE**, a town of Hindostan, in the prov. of Oude, district and 51 m. WNW of Lucknow.

**SULTANHISSAR**, a village of Turkey in Asia, in Anatolia, in the sanj. of Aidin, 18 m. ENE of Guzel-Hissar or Aidin, at the foot of the Kestenons, near a small affluent of the Baiuk-Mendere. On the summit of an adjacent hill are the traces of a temple, a theatre, and several other large edifices.

**SULTANIA**, a town of Persia, in Irak-Ajemi, 69 m. WNW of Kasbin. It contains only about 40 houses intermingled with numerous ruins. The ancient S. was founded by the Shah Khoda-Bend, who made it his capital, and erected in it several fine mosques, of which one, built of brick, is surmounted by a cupola 90 ft. in height. It became a place of great extent and importance, and its ruins still cover a wide area. Its ruin, commenced by civil discord, was consummated by Tamerlane. It still however retains in tolerable preservation the mosque of its founder, and one or two others.

**SULTANIA-HISSAR**, a fortress of Turkey in Asia, in Anatolia, in the sanj. of Biga, 14 m. SW of Burgas, on the r. bank of the river of the Dardanelles. It is rectangular in form, and presents one side to the channel, and another to a large town of the same name. Within the enclosure are several houses. The town comprises about 1,200 houses, of which 120 are Greek, 60 Armenian, 50 Jews, and the remainder Turks. It contains the tomb of the Capitan Pasha, who commanded the fleet burnt by the Venetians, and who was decapitated in this place. It is noted for its biscuit factories for the supply of the fleet.

**SULTAN-KHAN-WALLA**, a village of Lahore, 13 m. distant from Mudki. Pop. 1,200.

**SULTANPUR**, a town of Afghanistan, to the W of Jellalabad. It has an alt. of 2,286 ft. above sea-level, and is noted for its springs, gardens, and orchards.

**SULTANPUR**, or **KULU**, a town of Hindostan, in the Punjab, on the S slope of the Himalaya, and capital of a small state of the same name. It stands on a triangular tongue of land formed by the Beas and one of its affluents. It consists of two parts, an upper and a lower: the latter, which is nearest the river, contains the residence of the raja; the other, separated by a small bazaar, is chiefly inhabited by artificers and traders. Its trade consists in coarse cotton and woollen fabrics, and chintzes.

**SULTZE**, a village of Hanover, in the gov. of Lüneburg, and bail. of Bergen-an-der-Aller, 3 m. SE of Bergen, near the r. bank of the Oertze. Pop. 150. It has a salt-work.

**SULU ISLES**, a chain of islands in the Indian ocean, about 60 in number, deriving their name from the principal island in the group; but sometimes called by Spanish geographers the Felicia archipelago. They extend in a NE and SW direc-

tion, from the NE extremity of Borneo, to the W extremity of Magindanao, and are comprehended between the 4th and 7th parallels of N lat., and the meridians of  $119^{\circ} 30'$  and  $122^{\circ} 30'$  E.—The main island of Sulu, situated in N lat.  $6^{\circ}$ , E long.  $119^{\circ}$ , is 30 m. long, and from 6 to 12 m. broad. It lies about midway between the islands of Borneo and Magindanao, and is well-cultivated. There are few landscapes in the world, says Mr. Hunt, "that exhibit a more delightful appearance than the sea coasts of S. The luxuriant figure of the enchanting hills exhibits a rich scenery hardly ever equalled, and certainly never surpassed by the pencil of the artist; some with majestic woods that wave their lofty heads to the very summits; others with rich pasturage delightfully verdant, with here and there patches burnt for cultivation, which form an agreeable contrast with the enamelled meads; others again exhibit cultivation to the summit, chequered with groves affording a grateful variety to the eye. In a word, it only requires the country-seats, churches, steeples, ancient castles, and the decorations of art and civilized life, to form a terrestrial paradise; the miserable huts of the Sulos destroy that harmony of effect, which the blooming beauties of nature so temptingly solicit from the hand of man. The wet season is from May till September, and the dry from October to April. The prevailing winds are strong gales from the westward in June and July; in August and September S winds blow, and sometimes in prodigious gales. In December and January strong N gales, with a heavy sea, are experienced in S. roads; the rest of the year is subject to light winds, calms, and variable airs inclining to SW, during the wet, and to NE during the dry season. The greatest height of the therm. from March to September was  $87^{\circ}$ ; its greatest depression  $75^{\circ}$ , which was generally early in the mornings. This island, it is said, was generally peopled with Papuans, in a state of savage nature, who even at this day inhabit some of the mountains of the interior. The Chinese were, from time immemorial, in the habit of trading to these isles for pearls, but the first people that shed any rays of civilization among them, were the orang Dampuan, or, as the Chinese call them, Sonpotualan. They governed the sea-coasts, built towns, planted grain, opened the rivers. They however found the aborigines such a faithless race, that they at length abandoned it, and indeed during their sojourn, knocked as many on the head as they could come at. At length, the fame of their submarine riches reached the chiefs of Banjar, who opened a communication with them, and at length planted a colony, sending over immense numbers of settlers; and, with a view to conciliate the faithless possessors of this rich isle, a *putri* of exquisite beauty was sent and married to the principal chief, from which alliance have sprung all the subsequent sovereigns that have governed S. By this treaty of marriage, the island became tributary to the Banjarmasing empire. Among the improvements introduced by the Banjar people, are particularly enumerated, the elephant, the teak tree, and the cinnamon; the place becoming a delightful spot with considerable commercial advantages, attracted a number of settlers from Borneo and the southern isles of the Philippines, and they managed to drive the race of Papuans to the almost inaccessible hills for shelter and concealment, in which state of constraint, their numbers must have sensibly diminished." The cap. of this island, Bewan, or, as others call it, Sulu or Sung, is situated on the coast on the NW part of the island. Its houses are, after the manner of the Malays, elevated about 4 ft. from the ground. It contains about 3,500 dwellings. The

inhabitants of this island plant rice; but the crop cannot be depended on, as they are not sure of rain; they cultivate other roots, such as the Spanish or sweet potato, and the China yam, both red and white, and have a great variety of fine tropical fruits. Spotted deer, goats and black cattle, and wild hogs are numerous. In former times, a very extensive trade centred in this island. It was frequented by ships from Japan, Java, Sumatra, Ceylon, and the coast of Coromandel, which received in exchange for their cargoes beche-de-mer, wax, pearl oyster-shells, bird-nests, and tortoise-shell, agal, clove bark, black wood, ratans, sago, barks for dyeing, cassia, pepper, native camphire, sandalwood, shells, pearls, and spices.—The other two main islands are Basilan which is separated from the SW extremity of Mindanao, by a channel 15 m. wide, and Tawi-Tawi which lies off the NE extremity of Borneo.—The Portuguese formerly traded to a considerable extent with those islands; but from the dangers attending it, they for many years abandoned it to the Chinese. Traders, to succeed in the Sulo trade, must arrive there, in a vessel of about 5,000 piculs, in March, and must remain at least six months or about fifteen or twenty days before, and as many after the departure of the China junks. A convenient factory must be rented, the price from 300 to 500 dollars for the season; the vessel should be a fast sailer to effect her passage to China, and well armed, a force being required on shore. A few China and Bugis coolies are positively necessary to choose and pack the tripang and produce; for it is death to any settler or native to give you any information on this head. After the departure of the junks and trading vessels in August, the fair is in a manner broken up, the remaining produce is sent to Ho-Ho or Ponay, or retained on hand for the next season; the *datus* lying upon their oars until the next season, and the people going in search of produce to the ports in Borneo and the islands. The Sulos and resident Chinese are so acute in adulterating goods, that great precaution is necessary in making your purchases. The birds' nests, both black and white, should be invariably purchased loose and dry; those that are tied up, have dirt, fish, lead, and small pieces packed up in them to increase their weight; and the least damp turns this article red, and spoils it. Great care also is required in packing the nests so as to protect them from damp, and to prevent their breaking, which lowers the price in China; that which is white, large, thin, and without feet at the edges, is best. The camphor, they adulterate with rice and a soft crystal. When taken in the hand it should leave no dust behind; suspicious pieces, sparkling bright, should be tried by a candle; if it burns, it is camphor. The larger the pieces the better. They mix the trepang, white and black, old and damaged, and bring it wet to increase the weight; care must be taken to separate the qualities, to reject the rotten which breaks and appears rotten, while the good is tough and pliant; if wet, a lower price should be given, and it should be spread out to dry. This article also must be packed with great care, as it is very perishable; the least wet ruins it instantly. In tortoise shell, the thicker, the whiter, and the weightier the bundle, the more it is esteemed in China; the thin flexible pieces are of little value. In pearl shells, the dead ones are of a white opaque colour, and should be rejected. There is a great wastage in this article, and it should not be moved often. It takes up much room, and is but indifferent ballast. From their commercial intercourse with the Chinese and Spaniards, the Sulos have learnt the comforts and utility

of various articles of civilized life; most houses are furnished with benches; some of them with chairs, and when Europeans visit them, they never sit upon the floor. Several of the *datus* or chiefs have superb table sets of glass ware of Chinese or Spanish manufacture with gilt edges, which they are proud to display on all occasions; porcelain plates, dishes, cups, and saucers, brass and iron cooking-utensils, silver spoons, and Birmingham cutlery, are to be seen in every house; British embossed long-cells for bed carpeting; Madras palampores, China pillows, and chintz curtains, embellish the dormitories of all classes of people, and every man has a considerable number of Chinese chests with locks for the safe deposit of his valuables. As a head dress, most of the S. prefer the pulicat red handkerchief; a few only the fine Javanese handkerchief, which they wear tied round their heads, after the Malay fashion; the middling classes and slaves are partial to handkerchiefs of the most lively and showy colours of the French and American patterns. They wear their hair, pluck their beards and dye their teeth black, precisely like the Malays; their eyebrows are shaved into a fine moon-like arch after the Chinese fashion. They also wear the China *baju*, with full sleeves, either of rich gauze, silk or satins from China, or of Europe and Coast chintzes of the largest and liveliest patterns. The lowest slave vies with his *datu* in splendour of apparel. They have also war-dresses, composed of enormous silk and satin robes stuffed and quilted with cotton not unlike a Japanese bed-gown. Some of the *datus* wear a netted armour of thick brass wire, with helmet, visor, and target, manufactured for them by the Buguese. Their court-dresses are made in China. The women wear a close short *baju* of cotton of various colours, with short trousers of fine white cloth, or of flowered silk. They tie their hair on the fore part of the head; and wear rings on their fingers, and Chinese shoes on their feet. Every chief, whenever he ventures abroad, is accompanied by a band of trusty followers armed with their favourite weapons the spear and creese, and with targets of light wood. The S. are more polished than the generality of the Malays, they study the Chinese and Spanish customs and endeavour to imitate them as much as possible, though they affect to despise the one and to hate the other. The form of their government stamps in a great measure the character of these people and makes the difference between them and the Malays. The slender power of the sultan and the freedom of their mode of government give an unlimited latitude to commercial industry; and the life-interest which every slave retains to his personal acquisitions, gives the united mass of people a far greater proportion of activity and industry, than is to be found among any of their neighbours. Even a slave makes no obeisance either to the sultan or to his own master: all is equality in this respect. They are extremely revengeful: an insult offered to their dignity and consequence, is never forgotten and seldom forgiven. Yet, says Mr. Hunt, "though perpetually boasting of their courage and prowess they are known to be the most dastardly race in the universe. I have seen a Spanish launch, from Samboangan, with 16 men and a one-pounder, chase about 40 and capture 6 Sulo prows well-armed, with from 15 to 20 men each, and heavier metal." The Sulos seldom go in their own vessels to any distance, except on predatory excursions to make slaves among the Philippines. They are not much accustomed to the use of firearms, but are of a martial disposition, and have the character of being sanguinary and treacherous.



They have been accustomed to carry on an unceasing warfare with the Spanish colonies in the Philippines, and frequently with advantage. Prior to the year 1746, the Spaniards attacked them with a fleet of 30 ships, and obtained possession of the capital. In 1775, they attacked a settlement belonging to the East India company, on the island of Balambangan, and drove the settlers on board their vessels. In 1851 the governor-general of the Philippines, at the head of an expedition formed from the naval and military forces of those islands, attacked and completely destroyed the strongly fortified forts and defences of the capital of the main island of this archipelago. It appears that repeated acts of piracy committed on the inhabitants of the Philippines had induced the governor-general, in December, 1850, to proceed to S. with 3 war-steamers, a corvette, and a brig, to demand redress; but instead of listening to his warnings, the batteries of the forts opened fire on the Spanish vessels anchored in their roads. In the fort, which was taken by assault, there were nearly 300 dead; and so large a number as 143 pieces of artillery—many of heavy calibre—were the prize of this victory. The artillery found in the forts was of English manufacture; it bore the mark of the East India company, and appears to have been taken from the English settlement established on the island of Balambangan. The island had been ceded to the English by the sultan of S., who was found a captive of the Spaniards at Manila when the English forces occupied that fortress in 1763, and as a reward for the favour conferred of re-establishing him on his throne offered to cede the island, but afterwards barbarously and treacherously murdered the garrison. It may be, then, considered a benefit to humanity to have driven so formidable a piratical power from its strong position near the straits of Sunda. To the Spaniards it is of immense importance, and the exploit, in a military sense, does honour to their arms. To the Dutch also it is of considerable benefit; as they have had frequently to demand redress for piratical depredations on their possessions in Java. A treaty between the Spanish government and the sultan of S. has been concluded, by which that potentate is to become a pensioner on the Spanish crown to the extent of 2,400 dollars per ann., in consideration of which Spain is to have the right of erecting a fort at the capital with an adequate garrison. The measures which the governor-general has taken for the development of the resources of the islands since he assumed this difficult command have been approved by all residents therein, Spanish as well as of other nations. He has admitted the importation of Chinese Coolies, who are a most industrious and useful people, and most anxious to devote themselves to agriculture, which could be brought to a flourishing state in the Philippines, where all tropical produce, sugar, coffee, indigo, rice, tobacco, spices of all kinds, and a hemp called *abaca*, which makes the finest cordage for shipping, are produced in abundance, and could be increased to an incredible degree.

**SULUAN**, a small island of the Philippine archipelago, to the SE of the island of Samar, in N lat.  $10^{\circ} 55'$ , and E long.  $126^{\circ}$ .

**SULZ**, a village of the grand-duchy of Baden, in the circle of the Middle Rhine, to the S of Lahr. Pop. 1,050.—Also a town of Württemberg, in the circle of the Schwarzwald, to the SW of Calw, on the r. bank of the Neckar. Pop. 2,350. It has manufactories of fustian and of cotton fabrics. Epsom salts, sal ammoniac, and vitriol are wrought in the vicinity. A little to the SSW are the ruins of the castle of Albeck.

**SULZA**, or **STADT-SULZA**, a town of the grand-duchy of Saxe-Weimar, in the circle of Weimar-Jena, bail. of Rossla, 18 m. NE of Weimar, on the l. bank of the Ilm. Pop. 1,218. It has a grand ducal castle.

**SULZBACH**, a presidial and town of Bavaria, in the circle of the Ober Pfalz and Regensburg, 6 m. NW of Amberg, on the l. bank of a river of the same name, a small affluent of the Vils. Pop. 2,938. It is enclosed by walls and ditches, with four gates, and has a castle, a synagogue, and a remarkable aqueduct. It has manufactories of linen and several breweries. In the vicinity is a forge, and to the E on Mount Annenberg is a church. Pop. of presidial 13,300.—Also a river of the duchy of Nassau, which flows into the Lahn, on the l. bank, after a SW and NNW course of 22 m.

**SULZBERG**, a village of Bavaria, in the presidial and 5 m. SSE of Kempten. Pop. 1,460.

**SULZBURG**, a village of Baden, in the bail. and 4 m. NE of Mulheim. Pop. 900.—Also a village of Bavaria, in the presidial and 7 m. SSW of Neumarkt, near the r. bank of the Sulz.

**SULZE**, a walled town of Mecklenburg-Schwerin, 21 m. E of Rostock, near the l. bank of the Recknitz. Pop. 1,400.

**SULZFELD**, a village of Baden, in the bail. and 3 m. SW of Eppingen. Pop. 1,600.—Also a village in the presidial and 3 m. SSW of Kitzingen, near the r. bank of the Marne.

**SULZHEIM**, a village of Bavaria, in the presidial and 7 m. SE of Schweinfurt, on the r. bank of the Unkebach.

**SUMANAP.** See **SAMANAP.**

**SUMATRA**, a large but imperfectly known island, situated in the Indian ocean, between  $5^{\circ} 53'$  S lat., and  $5^{\circ} 45'$  N lat.; the equator dividing it into almost equal parts. It is 1,050 m. in length, and from 150 to 240 m. in breadth; with a general direction from NW to SE. It is separated from Malacca by the strait of that name; from Borneo by the strait of Carimata; and from Java by the strait of Sunda. Its N point stretches into the bay of Bengal; its SW coast is washed by the great Indian ocean. Crawford estimates its superficial area at 130,000 sq. m.; other geographers have carried it to 140,000 sq. m. Among the eastern people generally this island is known by the names of *Pulo-Puricht*, or *INDALAS*. The origin of the term *Sumatra* is quite uncertain. By Marco Polo it is called *Java Minor*; and by the Javanese, 'the land of Palembang.'

*Physical features.* This island is surpassed by few in the beautiful features of Nature. A chain of mountains runs through its whole extent; the ranges, in many parts, being double and treble, yet their alt. is not sufficient to occasion their being covered with snow during any part of the year. The highest point in the central chain is Indrapura, in N lat.  $1^{\circ} 34'$ , which rises to the height of 12,140 ft. above the level of the sea. Locsa in N lat.  $3^{\circ} 48'$  has an alt. of 11,150 ft. A number of the mountains are volcanic. Between these ridges are extensive plains, considerably elevated above the surface of the maritime lands; in these the air is cool; and they are esteemed the most eligible portions of the country; they are also the most cleared from woods which elsewhere cover both hills and valleys with an eternal shade. The W coast is well supplied with rivers, but, as the ridges from which they spring approach very closely to the sea, they are in general too shallow and rapid for the purpose of navigation. On the NE coast, the mountains being at a greater distance from the sea, the rivers attain a greater magnitude of volume. The largest rivers

on the western coast are the Katan, the Indrapura, the Tabayong, and Sinkel, which are all inferior to the Palembang, the Jambi, the Indragiri, and the Siah of the E coast. The Palembang is known to be navigable by small vessels for 200 m.—There are several lakes, amongst which are those of Sinkara and Dano. Mr. Anderson obtained information of a large lake in the interior, which is said to be a day's sail across with a good breeze. The borders of it are in a high state of cultivation; and there is an island in it upon which the edible birds' nests that are in request in the Chinese market are found.

*Climate.*] The climate of S. varies, of course, with the height of the ground: even on the plains, however, the heat is not so intense as might be expected in a country situated immediately under the equator. At Fort Marlborough, Mr. Marsden never observed the therm. rise higher than 86° in the shade, although at Natal, in lat. 0° 34' N, it is not unfrequently at 87° and 88°. As the country ascends towards the interior, the heat decreases rapidly, insomuch that beyond the first range of hills, the inhabitants find it expedient to light fires in the morning, and continue them till the day is advanced. In the journal of Lieut. Dare's expedition, it appears that, during one night's halt on the summit of a mountain, in the rainy season, he lost several of his party from the severity of the weather, whilst the therm. was not lower than 40°. The atmosphere is in general cloudy; a fog, called *kabut* by the natives, which is observed to rise every morning among the distant hills, is dense to a surprising degree; the extremities of it, even when near at hand, being perfectly defined; and it seldom is observed to disperse till about three hours after sunrise. On the W. coast southward of the equinoctial line, the SE monsoon, or dry season, begins about May, and slackens in September: the NW monsoon begins about November, and the hard rains cease about March. The monsoons for the most part commence and leave off gradually there; the months of April and May, October and November, generally affording weather and winds variable and uncertain. It thus appears that this island is for one half of the year deluged with constant rains.

*Productions.*] It may easily be imagined, that a country situated immediately under the equinoctial line, and covered with deep alluvial soil, must be luxuriantly fertile; but the enormous size to which many of its productions arrive is almost incredible. We should look in vain in extra-tropical climates for any single flower measuring 3 ft. in diameter, like that of the parasitical *Rafflesia*; or for a tuberose edible root weighing 400 lbs.; or for melons, pumpkins, and other species of the cucurbitaceous family, equal to half that weight; or for a shell-fish, one of which might sup 24 men. The choicest trees, herbs, and fruits, are everywhere found, many of them demanding no labour of cultivation whatever. The villages are situated in the midst of the most luxuriant groves and plantations of the cocoa-nut, betel-nut, bananas, jacks, dourians, mangosteens, guavas, mangoes, pomegranates, pine-apples, cashew-apples, tamarinds, the bread-fruit, several varieties of the orange, the lemon, the lime, and the besing or plantain; while the air is scented with the sweetest perfumes from innumerable flowers. Among the productions of S. may be mentioned the camphor-tree, which produces camphor in a concrete state, indigo, brazil-wood, pepper, benzoin, coffee, cassia, and cotton. The most important article of cultivation in S. is rice, of which there are different species, distinct in shape, size, and colour of grain, modes of growth, and delicacy of flavour:

all these, however, may be ranged under the two comprehensive classes of upland rice, from its growing on high and dry grounds, and lowland or marshy rice, from its growing on the low and marshy grounds. For the cultivation of upland rice, the site of woods is universally preferred, and the more ancient the woods the better, on account of the superior richness of the soil; the continual fall and rotting of the leaves forming a bed of vegetable mould, which the open plains do not afford, being exhausted by the powerful operation of the sun's rays, and the constant production of a rank grass. The husbandman makes choice of a spot for the plantation of upland rice, on the approach of the dry season in April or May, and he proceeds to clear it of wood, which is a very laborious task. The plantations of low ground rice are for the most part overflowed in the rainy season between the months of October and March, to the depth of six inches or a foot. The total annual produce of pepper has been roughly estimated at 45,000,000 lbs. The nutmeg and clove have been introduced with great success at Bencoolen. The silk-cotton is among the most remarkable of the Sumatran vegetables. "It grows," says Marsden, "in pods from four to six inches long, which burst open when ripe. The seeds entirely resemble the black pepper, but are without taste. The tree is remarkable, from the branches growing out perfectly straight and horizontal, and being always three, forming equal angles at the same height: the diminutive shoots likewise grow flat, and the several gradations of branches observe the same regularity at the top. Some travellers have called it the umbrella-tree, but the piece of furniture called a dumb waiter exhibits a more striking picture of it." This cotton has not hitherto been applied to any other purpose than the stuffing of pillows, since it is supposed to be too brittle for the purposes of manufacture; but Marsden is of opinion that it has not hitherto been properly tried. In the forests are found the cabbage-tree, ebony, pine, sandal, the aloe, the teak, the manchineel, iron wood, and the banyan-tree.—Man alone seems here to degenerate, while other animals obtain their largest size. The elephants of S. are equal in magnitude to those of Ceylon; and the tiger, the rhinoceros, and the buffalo, are superior to those of the continent. The tigers are of great size, and are very numerous; but, from a superstitious idea that they are animated by the souls of departed heroes, the natives can scarcely be brought to kill them. The orang-outang is a native of S., and several other species of *simia* inhabit its forests. The rivers are infested with alligators, to which Marsden seems inclined to attribute the powers of fascination. These alligators are also protected by the superstitious reverence with which the natives regard them. The hog-deer, an animal rather larger than a rabbit, yields the bezoar, a substance to which have been attributed many medicinal virtues. "The buffaloes of S. are fuller," says Mr. Anderson, "than any bullock I ever saw in Smithfield market; and—to descend in the scale of beings—the common domestic fowl grows so large, that, standing on the ground, it can pick crumbs from an eating-table." It is a disputed point whether the huge hippopotamus exists in the rivers of S. Red ants, leeches, and musquitoes, form disagreeable annoyances in this country.

*Minerals.*] Gold is procured in the central parts of the island. It has been asserted, that from 10,000 to 12,000 ounces of this metal are annually received at Padang alone. Silver is not known. Tin is a considerable article of commerce. Iron ore is procured, but not in large quantities. Sulphur and



yellow arsenic are articles of traffic. Sulphur is collected in large quantities among the numerous volcanoes; and saltpetre is extracted from the impregnated earth which is chiefly found in extensive caves that have been long frequented by birds and bats, from whose dung the soil is formed, and acquires its nitrous properties. Coal, mostly washed down by the floods, is procured in different parts; but it is light, and not considered of a good quality. Mineral and hot springs, in taste resembling those of Harrogate, are found in several districts. Earth-oil, used chiefly as a preservative against the destructive ravages of the white ant, is collected at Ipu and elsewhere. There is scarcely any species of hard rock to be met with in the low parts of the island, near the sea-shore, in the cliffs along which various petrifications and sea-shells are discovered.

**Commerce.]** The most general articles of import from the coast of Coromandel are various cotton goods, as long-cloth blue and white, chintz, coloured handkerchiefs, and salt; from Bengal, muslins, striped and plain, and several other kinds of cotton goods, as cossaes, baftaes, hummums, taffetas, and some other silks, and opium in considerable quantities; from the Mafabar coast, various cotton goods, mostly of a coarse raw fabric; from China, coarse porcelain, *kwalis* or iron pans, in sets of various sizes; tobacco shred very fine; gold thread, fans, and a number of small articles; from Celebes, Java, Balli, Ceram, and other eastern islands, the rough striped cotton cloth called *kain sarong*, or vulgarly *bugis clouting*, being the universal body dress of the natives; krisies and other weapons; silken krisbelts, hats, small pieces of ordnance, commonly of brass, called *rantakas*; spices, and also salt of a large grain, and sometimes rice chiefly from Balli; from Europe, silver, iron, steel, lead, cutlery, various sorts of hardware, brass wire, and broad cloths, especially scarlet. The Dutch, since the cession to them of Fort Marlborough and the other British possessions in S., pursuant to the treaty of 1824, have omitted no opportunity of diverting the native trade from Penang and Singapore. They have taken possession of the rajah of Sinkel's territory on the W coast of Sumatra, and also of Barus, thus effecting a monopoly of the trade of these districts; they have further taken possession of the port of Tourouman, while fears are entertained lest they should likewise occupy all the ports between Sinkel and Achin, whence the Straits settlements have large supplies of pepper, &c. They have recently planted a settlement on the NE coast, threatening Lancat, Delli, and the kingdom of Siak; so that there is every reason to expect the entire subjugation of S., and the destruction of all trade with Britain, except on such terms as the Dutch shall be pleased to dictate.

**Population.]** The inhabitants of S. are rather below the middle size; their limbs are generally slight, but well-shaped, and particularly small about the wrists and ancles. The women follow the preposterous custom of flattening the nose and compressing the skull of children newly born; they also pull out the ears to make them stand at right angles with the head. The males destroy their beards, and keep their chins remarkably smooth. Their complexion is yellow, wanting the red tinge that constitutes a tawny or copper colour. The females of the upper classes, not exposed by their habits of life to the rays of the sun, approach to a degree of fairness. Persons of superior rank encourage the growth of their hand-nails to an extraordinary length; the hands of the natives in general, and even of the half-breed, are always cold. The inland natives are superior in strength and size to the Malays of the coast, and possess also fairer complex-

ions. Among the hills the inhabitants are subject to monstrous wens or goitres on the throat. Both sexes have the extraordinary custom of filing and disfiguring their teeth, which are naturally white and beautiful from the simplicity of their food. Many, particularly the women of the Lampong country, have their teeth rubbed down even with their gums; others have them formed into points like equilateral triangles, while some file off no more than the outer extremity, and then blacken them with the empyreumatic oil of the cocoa-nut shell. Their chiefs sometimes set their teeth in gold, by casing the gums with a plate of that metal. This plate is sometimes indented to the shape of the teeth, but more frequently it is quite plain, and is never removed. See articles BATTAS and MENANGKABOS.

**Languages.]** The Malays of S. use the Arabic character, and have intermixed their language with the Batta, Arabic, and Portuguese. The other principal languages are the Batta, the Rejang, and the Lampong; the difference between these languages, however, is chiefly marked by their being expressed in distinct written characters.

**Religion.]** The ancient religion of the Rejangs, the Sumatran race with which we are best acquainted, is now scarcely to be traced; at present they seem to have no object of worship whatever, unless it be a species of genii which they call *orang alus*. The superstition which has the strongest influence on their minds is that which leads them to venerate, almost to the point of worshipping, the tombs and remains of their deceased ancestors.

**Topography.]** The natives divide S. into three regions: 1st, Balla, in the N, which includes the kingdom of Achin, with the vassal principalities of Pedir, Passay, and Delli. It is bounded on the E side of the island by the river Siak, and on the W by the Sinkol. The interior of this division is inhabited by the Battas. The 2d division is the ancient empire of Menangkabo, comprehending the kingdoms of Jambi and Andragiri, on the E coast,—in the interior the country of the Rajangs,—and on the W coast the Baro country, Tappanooly, Natal, and others, with the kingdom of Indrapura. The 3d division is called Ballumary, or Kampang, and embraces the SE end of the island, including Bencoolen. See articles ACHIN, BENCOLEN, CAMPAR, and PALEMBANG. Excepting the Menangkabos, the whole coast of S. is nominally under five sovereignties, viz.: those of Palembang, Jambi, Indragiri, Siak, and Achin; but it is generally ruled by a number of petty, feudal, half-patriarch chiefs. In fact, any one who gains the favour of the people by oratory or wealth, and builds a fort to defend himself from rivals, may become a rajah; and he may even withhold all tribute from the general government, if he can only successfully fight its few agents and little ships. They have no synonyme in their language for our term *law*, but adopt old custom, individual influence, or the Koran, for their exclusive guidance. Thefts and robberies are mostly confined to the mean and abandoned of the people; but to rob foreigners or enemies is as little regarded a crime, as it is by the Bedouins of Arabia, or other semi-barbarous tribes. Revenge is naturally the most prominent passion of the Sumatrans; and, in desperate cases, it has raged so high as to impel the infuriated savage to run a muck,—a frenzied act, in which he rushes madly through the village with a drawn dagger, thrusting at every person he meets, until he meets death himself. But this method of venting desperate vengeance is nearly suppressed. The Battas, occupying the northern half of the W coast, are said to be the most savage and heathenish, because they were known to be cannibals; but it is

now ascertained that they ate the flesh of enemies and criminals only as a capital penalty, and to show their fullest detestation of them. Their number has been estimated at about 500,000. They are comparatively an honest, exact, but irascible people. They have had from the beginning a simple language, written from the bottom upward, by a style on bamboo, which all of them can easily read and write; and the great orators and deliberative assemblies of this tribe are peculiarly distinguished. Their religion, if they have any, is of Hindu origin.

**SUMBĀWA**, or **SOEMBĀWA**, a large mountainous island in the Eastern seas, extending about 160 m. from E to W, and about 20 m. in average breadth. The strait of Alas separates it on the W from Lombok; and the strait of Sapie, on the E, from Commodo and Flores. Its SW point is in S lat.  $9^{\circ} 2'$ , E long.  $116^{\circ} 42'$ . Its coasts are chiefly indented by bays and inlets; and it is divided into six native states: viz. Bima, Dampo, Tambora, Sangar, Pekat, and Sunbawa, all governed by their respective chiefs, who are either allies of the Dutch, or under their protection. The productions are sandal-wood, rice, horses, saltpetre, sulphur, wax, birds'-nests, and tobacco. The number of horses annually exported from Bima is about 1,000. The finest of these are procured from the small island of Gonong Api, situated in S lat.  $8^{\circ} 12'$ , E long.  $119^{\circ} 6'$ , at the NE end of Bima harbour, about 3 or 4 m. from Sumbawa point, and forming the W side of the N entrance of Sapie straits. It is composed of one immense volcanic mountain, which terminates in two high peaks, and the soil is of great fertility. Another volcanic mountain, Mount Tambora, on the N coast of Sumbawa, in E long.  $118^{\circ} 1'$ , is said to be responsive to that of Gonong Api; an explosion of the latter being immediately answered by an eruption from the former. A tremendous eruption of this latter volcano took place in April 1815. Bima bay stretches deeply inland, and forms a safe harbour. The Dutch have a fort on its E side. Ships may be plentifully supplied with refreshments, as buffaloes, calves, sheep, fruit, and vegetables, both at Bima and the town of Sumbawa. This last place is situated on a large bay, open to the N and NW, and a good harbour stretches inland between the reefs at the W side of the entrance. It is about 100 m. to the W of Bima, and is governed by a chief denominated a rajah. The bay of S. lies to the southward of Vlank inland. The village is about 2 m. inland. Tambora is the place mostly resorted to by the dealers in horses. Gold-dust is found in S., particularly in the district of Dampo, which also supplies teak-timber, and is the best-cultivated district in the island. Pearls are fished in a large bay to the W of Bima bay, also at Pekat.

**SUMBHULPUR**, a district and town of Hindostan, in the prov. of Gundwana. The district is divided by the Mahanuddy into two unequal parts, and presents a finely varied surface of hill and dale, jungle and cultivation. It contains in the early part of the year extensive swamps. Its principal productions are rice, cotton, diamonds and gold-dust. The town is on the E side of the Mahanuddy, 167 m. WNW of Cuttack, and contains a fort, several Hindoo temples and other edifices.

**SUMBI**, a village of Afghanistan, on the r. bank of the Cabul, and 26 m. E of the town of that name.

**SUMBILLA**, a town of Spain, in the prov. of Navarra, 27 m. N of Pamplona, at the entrance to the valley of S. Estiban-de-Lerin, on the Bidassoa, by which it is divided into 2 parts. Pop. 1,230. It has two churches.

**SUMBUL**, **SIMBUL**, or **SUMBHULPUR**, a village of Hindostan, in the prov. of Cashmir, on the l. bank

of the Jelum, which is here about a hundred yards broad, and crossed by a bridge built of deadars.

**SUMBURGH**, a soaring headland at the S extremity of Shetland. The headland is noticed in our article on **DUNROSSNESS**. The root of S.,—a Scandinavian term for a powerful and tumultuous collision of tidal currents,—is formed at Sumburgh-head by the meeting of the rapid tides from the opposite sides of Shetland which even during a calm, and as seen from the headland, produce a tumbling current, at first about 2 or 3 m. broad, and afterwards gradually narrowing to a point, and softening into kindred features with the adjacent glassy waters. There is a lighthouse here in N lat.  $59^{\circ} 51'$ , and W long.  $1^{\circ} 16'$ , showing one light, at the height of 300 ft. above high-water.

**SUMEGH**, **SIMEGH**, or **SCHIMEGH**, a town of Hungary, in the comitat of Szalad, 24 m. NE of Szala-Egerszeg, on a height.

**SUMENE**, a canton, commune, and town of France, in the dep. of the Gard, and arrond. of Le-Vigan. The cant. comprises 8 com. Pop. in 1831, 7,176; in 1846, 7,287. The town is 6 m. E of Vigan, in a narrow valley, on the r. bank of the Rientort. Pop. in 1846, 3,047. It has manufactories of hosiery, and several silk-mills.—Also a river in the dep. of the Haute-Loire, which descends from Mount Megal, near Gueyrieres, in the cant. and 3 m. NE of St. Julien-Chapteuil, runs W. and after a course of 15 m. joins the Loire on the r. bank, 3 m. NNE of Puy.

**SUMEREIN**, or **SOMMEREIN**, a town of the archduchy of Austria, in the country below the Ens, and lower circle of the Weinerwald, 21 m. SE of Vienna, and near the Hungarian frontier. It has manufactories of pottery.

**SUMIDOURO**, a parish of Brazil, in the prov. of Minas-Geraes, 9 m. ESE of Marianna. Pop. 2,000.—Also a river of the prov. of Matto-Grosso, which has its source in the Campos Parecis, near Diamontono, and flows into the Arinos on the l. bank, in W long.  $56^{\circ}$ , and after a total course in a NE direction of about 240 m.

**SUMISWALD**, a large and handsome village of Switzerland, in the cant. and 18 m. ENE of Berne, and bail. of Trachselwald. Pop. of village, 1,240; of com., 4,285. It has a large poor's-house.

**SUMMA-KA-BUSTI**, a village of Sinde, 9 m. W of Omereote.

**SUMMANI**, a village of the Punjab, on the road to Puncn from Vazirabad.

**SUMMERFIELD**, a township of Monroe co., in the state of Michigan, U. S., 77 m. SE of Lansing, drained by Raisin river, and intersected by the Michigan, Southern and Northern Indiana railroad. The surface is undulating, but contains some fine tracts of prairie. Pop. in 1840, 395; in 1850, 472.—Also a township of Seneca, Monroe co., in the state of Ohio. Pop. in 1840, 125.

**SUMMERHILL**, a town in the p. of Laracor, co. Meath, 5 m. SSE of Trim. Pop. in 1851, 208.

**SUMMERHILL**, a township of Cayuga co., in the state of New York, U. S., 134 m. W of Albany, drained by the head branches of Fall creek. Pop. in 1840, 1,446; in 1850, 1,251.—Also a township of Cambria co., in the state of Pennsylvania, 101 m. WNW of Harrisburg, drained by branches of Kiskiminetas river, and intersected by the Pennsylvania railroad. Pop. in 1840, 1,005.

**SUMMERHOUSE**, a township in the p. of Gainford, co. palatine of Durham,  $6\frac{1}{2}$  m. WNW of Darlington. Area 809 acres. Pop. in 1851, 477.

**SUMMER-ISLANDS**, a group of isles and islets at the entrance of Loch-Broom, on the W coast of the counties of Ross and Cromarty. They amount



to about 30; yet only one, Tanera-More, is inhabited, and only 9 or 10 are of sufficient size to be occupied as pastures. They lie at from a  $\frac{1}{2}$  m. to  $7\frac{1}{2}$  m. distance from the coast; and extend a little upwards of 7 m. from N to S. Tanera-More is about 2 m. long, and 1 m. broad; and shows an irregular and rocky surface, rising to the height of 400 or 500 ft. above sea-level. The other isles are all similarly rocky, but of much less elevation.

**SUMMERVILLE**, a village of Nicholas co., in the state of Virginia, U. S., 268 m. SW by W of Richmond, on Gauley river. Pop. in 1840, 125.—Also a village of Chatoga co., in the state of Georgia, on the W side of Challoga river, and 181 m. NW of Milledgeville. Pop. 175.—Also a village of Charleston district, South Carolina, on the S. Carolina railroad, and 104 m. from Columbia.

**SUMMIT**, a county in the NE part of the state of Ohio, U. S., comprising an area of 532 sq. m.; drained by Cuyahoga river and its tributaries, and by the head waters of the Tuscarawas river, and intersected by the Cleveland and Pittsburg, Cleveland, Zanesville and Cincinnati railroads, and by the Ohio canal. It is in some parts hilly, but is generally fertile. Pop. in 1840, 22,560; in 1850, 27,485. Its capital is Akron.—Also a township of Schoharie co., in the state of New York, 16 m. SW of Schoharie, drained by Charlotte river, and by tributaries of Schoharie creek. The surface is hilly, and the soil chiefly sandy loam. Pop. in 1840, 1,800; in 1850, 2,010.—Also a village of Washington township, Cambria co., in the state of Pennsylvania, 129 m. W by N of Harrisburg, on a head branch of Kiskiminetas river, and on the Philadelphia and Pennsylvania railroad. Pop. in 1840, 200.—Also a township of Waukesha co., in the state of Wisconsin, 57 m. E of Madison, drained by branches of Rock and Fox creeks. It is level, and possesses considerable fertility. Pop. in 1850, 1,008.

**SUMMIT-HILL**, a village of Carbon co., in the state of Pennsylvania, U. S., on the Manch Chunk and Summit railroad, and 64 m. NE of Harrisburg. Pop. in 1850, 2,501.

**SUMMONTE**, a town of Naples, in the Principato-Ultra, district and 5 m. NW of Avellino, and cant. of Mercogliano, at the foot of Monte-Vergine. Pop. 1,450.

**SUMMWIX**, or **SOMMWIX**, a fine valley of Switzerland, in the cant. of the Grisons. Pop. 1,420.

**SUMNER**, a county in the N part of the state of Tennessee, U. S., comprising an area of 640 sq. m., bordered on the S by Cumberland river, and drained by branches of that river, and of Big Barren river. The surface is undulating, and the soil very fertile. It is intersected by the Louisville and Nashville, and by the Nashville and Cincinnati railroads. Pop. in 1840, 22,445; in 1850, 22,717. Its cap. is Gallatine.—Also a township of Oxford co., in the state of Maine, 8 m. N of Paris. It has an undulating surface, and is drained by a branch of the Androscoggin river. Pop. in 1840, 1,269; in 1850, 1,151. It contains two villages, distinguished as East and West Sumner.

**SUMNEYTOWN**, a village of Montgomery Co., in the state of Pennsylvania, U. S., 20 m. NE of Norristown, on Perkioman creek.

**SUMTER**, or **SUMPTER**, a central district in the state of S. Carolina, U. S., bordered on the NE by Lynch's creek, and on the W by Santee river, and drained by Black river and its branches, and by branches of Santee river, and intersected by the Wilmington and Manchester, the Camden branch, and the Columbia branch railroads. Pop. in 1840, 27,892; in 1850, 33,220. Its cap. is Sumterville.—Also a co. in the W part of the state of Alabama,

comprising an area of 1,200 sq. m., bounded on the NE and E by Tombigbee river, and intersected by the Alabama and Mississippi railroad. The surface is hilly, but its soil is generally fertile. Pop. in 1840, 29,937; in 1850, 22,250.—Also a co. in the SW part of the state of Georgia, comprising an area of 589 sq. m., drained by branches of Flint river, and intersected by the South-western railroad. It has a diversified surface, and a highly productive soil. Its cap. is Americus.—Also a township of Wayne co., in the state of Michigan, drained by Huron. Pop. in 1840, 193.

**SUMTERVILLE**, a village of Sumter district, in the state of S. Carolina, U. S., between the branches of Black river, on the Wilmington and Manchester railroad, and 48 m. E by S of Columbia. Pop. in 1840, 400.—Also a village of Sumter co., in the state of Alabama, 64 m. SW of Tuscaloosa, on the W side of Tombigbee river. Pop. 300.

**SUNA**, a village of Sardinia, in the div. and 88 m. N of Novara, prov. and mand. and 1 m. NW of Pallanza, on the N bank of the gulf of Toce, on a branch of Lake Maggiore. Pop. 1,035.

**SUNAPER**, a lake of Sullivan and Merrimac cos., in the state of New Hampshire, U. S., 9 m. long, and about  $1\frac{1}{2}$  m. broad, at an alt. of 1,080 ft. above sea-level. It discharges itself by Stigar river into the Connecticut.

**SUNART**, a district in the extreme N of Argyleshire. Its length is 12 m.; its breadth 6 m. It is bounded on the N by Loch-Shiel; on the E by Ardgour; on the S by Loch-Sunart; and on the W by Ardnamurchan.—Loch S. is a long inlet of the sea, stretching from the N entrance of the sound of Mull, eastward to within 5 m. of the upper end of Loch-Linnhe, in Argyleshire. It separates Ardnamurchan and Sunart on the N from Mull and Morven on the S. Its west end is for 7 m. identical with the sound of Mull; and is described in our article MULL (SOUND OF). It contains a number of islets, the chief of which are Oransay,  $1\frac{1}{2}$  m. long,—Carnich, nearly  $1\frac{1}{2}$  m. long,—and Riska, Dungallen, Garve, and More, all of considerable size. Glen-Tarbert—a rough pastoral valley—extends from its head to Loch-Linnhe, and brings down to it a parliamentary road from Coranferry, whence the communication is continued to Fort-William.

**SUNBURY**, a town of Augusta township, in Northumberland co., in the state of Pennsylvania, U. S., 48 m. N of Harrisburg, beautifully situated on the E side of the Susquehanna, below the confluence of its N and W branches at Northumberland, below Shamokin Dam, and on the line of railroads from Delaware to Lake Erie. Pop. in 1840, 1,108; in 1850, 1,218.—Also a village of Yates co., in the state of N. Carolina, 224 m. ENE of Raleigh. Pop. in 1840, 76.—Also a village of Liberty co., in the state of Georgia, 40 m. S by W of Savannah, on the S side of Medway river, at the head of St. Catherine's sound. Pop. 200.

**SUNBURY**, a parish in Middlesex, 14 m. SW by W of London. Area 2,400 acres. Pop. 2,076.

**SUNCHING**, a town of Bavaria, in the circle of the Upper Pfalz, and presidial of Stadtam-Hof, and 15 m. SE of Ratisbonne, on the l. bank of the Grande-Laben. Pop. 400. It contains two churches, and has a brewery, a brick-work, and saw and paper-mills.

**SUNCOOK**, a village of Merrimac co., in the state of New Hampshire, U. S., on the W side of Suncook river, near its junction with the Merrimac, and on the Portsmouth and Concord railroad. The river issues from a group of ponds, near the summit of one of the Suncook mountains, and discharges itself into the Merrimac at Allerstown.

**SUNDA**, a town of Hindostan, in the prov. of Bejapur, in N lat. 14° 42'. It was at one time a very large and thriving place, encircled by a triple wall, but when attacked by Hyder Aly in 1763, the fortifications were levelled, and the town nearly destroyed.

**SUNDA (STRAITS OF)**, an arm of the Eastern sea, which separates the large islands of Sumatra and Java, and leads from the Indian to the Pacific ocean, by the Malays termed **SUNDA-KALAPA**. The length of this channel taken from Flat-point, the S extremity of Sumatra, in S lat. 5° 59', to Varkens or Hog point, is about 70 m., and on the opposite coast, from Java-head, in S lat. 6° 46' 40", to Bantam point, about 90 m. In the mouth of the straits lies Prince's island, by which two passages are formed. That which lies between Prince's island and Java, made use of for the most part by ships which have to pass the straits during the SE monsoon, in order that, sailing close in with the Java shore, they may soon get within anchoring depth, and escape the danger of being driven to sea with the currents which, at that time of the year, set strongly out of the straits to the westward. The other passage, called by seamen the Great channel, sometimes also serves as an entrance to the straits during the SE monsoon, but it is only with difficulty, and after struggling with the SE winds and the current, that this can be effected. In the narrowest part of the straits, opposite to Hog's point on Sumatra, lies an island called Thwart-the-Way or Middle Isle. A strong current runs through the passage on both sides of this island during the whole year, setting with the prevailing winds either to the NE or SW. The chief islands in the straits of Sunda are Prince's Isle or Pulo-Panaitan, Krakatau, Merak, Thwart-the-Way, and Pulo-Baby; the others are small and insignificant, mostly founded on beds of coral and covered with trees. The Dutch claim an absolute sovereignty over the straits of S., founding their pretensions on the circumstance of their superiority over Bantam on the Java shore, and Lampong on that of Sumatra.

**SUNDA ISLANDS**, a name given to a large group in the Indian archipelago, embracing Borneo, Sumatra, Java, Celebes, Banca, and Billiton, with the lesser islands of Sumbawa, Bali, Lombok, Sumba, Flores, Soler, and others.

**SUNDALS-ELV**, a river of Norway, in the dio. of Drontheim. It issues under the name of Driva-elv, from a lake, at the foot of the Snoechaetten, a summit of the Dovrefield, at the S extremity of the bail. of Drontheim; runs first E, then N, and afterwards W; enters the bail. of Romsdal, where it takes the name of Sundal; and after a total course of about 75 m., flows into the gulf of Tingvold.

**SUNDAY ISLAND**, an island of Australia Felix, in Gipp's-land, in Port Albert.

**SUNDERBERG**. See **SONDERBERG**.

**SUNDERBUNDS**, an extensive district of Bengal, situated in the delta of the Ganges, and intersected by innumerable rivers or creeks, all of which are salt. It is, generally speaking, uninhabited, except by deer and tigers. The few scattered villages are mostly situated at the junction of two of the most frequented rivers, and are supplied with fresh water by the passing boats. The navigation through the S. is extremely intricate; but there are pilots who are well acquainted with all its intricacies, and who conduct boats through with great safety. This route is seldom taken as a matter of choice; but boats coming down to Calcutta in the hot season, are obliged to pass through the S.; and boats from Chittagong and Arracan come through them in all seasons of the year. See articles **BENGAL** and **GANGES**.

**SUNDEREN**, a town of Prussia, in the prov. of Westphalia, regency and circle and 5 m. SSW of Arensburg, in a valley, on a small affluent of the Ruhr. Pop. 590.

**SUNDERLAND**, a parl. borough and sea-port in the N division of Easington ward, co.-palatine of Durham, 12 m. NE by N of Durham, on the river Wear, and in the line of the Brandling Junction, and the Durham and Sunderland railways. Area of the parl. borough, including, besides, the p. of Sunderland, the townships of Bishop-Wearmouth, Bishop-Wearmouth-Pans, Monk-Wearmouth, Monk-Wearmouth-Shore, and Southwick, 5,095 acres.

Pop. in 1831, 40,735; in 1841, 56,226; in 1851, 67,394. Area of parish 178 acres. Pop. in 1851, 19,058. S. and Bishop-Wearmouth, though distinct parishes, now form one continuous town, well situated for shipping, on the S bank of the Wear, at its confluence with the sea; and increased, as a great centre of pop., by the numerous streets also spreading from the N bank of the river in the township of Monk-Wearmouth. The principal street is a spacious one about 1 m. in length, with a gentle ascent from the vicinity of the river, where it is joined by numerous narrow lanes leading down to the shipping staiths and quays. Elegant new streets have been struck off on either side, especially about the middle of its ascent, and towards the bridge. In the older and more extensive parts of the town, however, chiefly occupying the immediate vicinity of the river, the streets or rather lanes are of a very different description, most of them being crowded and dirty, though the scene of some of the most thriving traffic of the port. Among the public institutions of S. may be noted an extensive subscription library, an Athenæum, a mechanics' institution, a horticultural society, and a polytechnic society. S. is not celebrated for the architecture of its public edifices. The most admirable of these is the iron-bridge, remarkable for its height and span, and peculiar lightness of construction, connecting it with the township of Monk-Wearmouth. This noble structure, built at an expense of £26,000, and opened in 1796, consists of one vast arch, 236 ft. in the span, and 100 ft. in height from low-water mark, allowing vessels of large burden to pass underneath with merely lowered top-gallants. The abutments are solid masonry 24 ft. thick, 42 ft. broad at the bottom, and 37 ft. at the top. The breadth of the roadway is 32 ft., with flagged footpaths on each side. The whole weight of the iron employed is 260 tons, of which only 46 tons are malleable. The intercourse between Sunderland and Monk-Wearmouth, farther down the river, is maintained by the constant transit of ferry-boats. The income of the borough in 1840 was £4,246; in 1849, £3,605. S. was enfranchised by the Reform act, and now returns 2 members to parliament. The number of electors registered, in 1837, was 1,581; in 1852, 1,973. It is one of the polling-places for the N division of the county.—S. owes its importance to its situation upon the coast, at the influx of a navigable river, flowing through a district remarkably rich in minerals, especially coal and lime. The harbour, which was exposed to serious injury from land-floods and the formation of sand-banks, has been greatly improved of late years. It is formed by piers, on the N and S sides of the river. In 1850, a new great dock was opened. The works, when the southern outlet is completed, will extend along to Hendon-bay. First is the tidal harbour of 2½ acres opening from the river; next the half-tide basin (2½ acres), leading from it to the great dock of 20 acres; near the S end of which are the two jetties, one occupied by staiths for the shipment of coals, the rest of the accommodation being attended for general traffic. The widths of the entrances between the tidal harbour and the half-tide basin are respectively 45 and 60 ft., and that between the half-tide basin and the great dock 60 ft. The sills are placed 6 ft. below low water mark of ordinary spring tides, being 2 ft. lower than the bar at the mouth of the river, the depth of which cannot be increased without a large expense in prolonging the piers into the deep water of the bay. There will therefore be 20 ft. 6 in. depth upon the sills at high water of ordinary spring tides, and 17 ft. at dead neap-tides. In the half tide basin the depth



at high water of ordinary spring tides is 22 ft. 4 in., and at dead neap tides 18 ft. 10 in. In the great dock the depth in the middle at high water of ordinary spring tides will be 24 ft., and at deep neap tides 20 ft. 6 in. The grand staple of this thriving port is coal, a considerable portion of which is brought down the river, from staiths farther up, in keels. Large quantities, however, are now brought down the line of the Brandling-Junction railway. The amount of coal shipped, coastwise, in 1838, was 948,429 tons; to foreign ports and British settlements, 308,168 tons; in 1853 the total shipment was 693,912 chaldrons. Lime also forms an important article of trade; upwards of 40,000 tons being shipped annually for Yorkshire and Scotland. Other articles of export are supplied by the numerous manufactories of the town and neighbourhood, comprising extensive establishments for making crown and other glass, chemical works, potteries, roperies, &c. The imports are chiefly flour, wine, tobacco, spirituous liquors, timber, tallow, iron, and flax. The following is a statement of the gross receipts of customs during various years:—

In 1791, they amounted to	£45,567
1800,	11,480
1810,	8,413
1820,	16,688
1835,	62,626
1840,	119,681
1848,	78,504

Ship-building is carried on to a large extent. In 1840, no fewer than 310 vessels were built and registered at this port, many of which were from 300 to upwards of 600 tons burden. In 1853, 153 vessels = 68,735 tons were built here. With respect to the number of its ships and their amount of tonnage, S. is the fourth port in the United Kingdom; the three by which it is exceeded being London, Newcastle, and Liverpool. In 1829 there were 624 ships belonging to it, with a tonnage of 107,628 tons. In 1839 they had increased to 713, with a tonnage of 122,000 tons; in 1851, they were returned at 1,025 = 216,635 tons. A number of steamers are constantly employed towing vessels in and out of the harbour, at the mouth of which 4 or 5 life-boats are established. Besides those manufactories, connected with Sunderland, formerly mentioned, there are saw-mills, a flax-mill, and quarries of stone peculiarly suited for grind-stones. S. confers the inferior title of earl upon the Duke of Marlborough.

**SUNDERLAND**, a township of Franklin co., in the state of Massachusetts, U. S., on the E side of the Connecticut; and 79 m. W by N of Boston. It is partly mountainous, but possesses considerable fertility. Pop. in 1840, 438; in 1850, 792.—Also a township of Bennington co., in the state of Vermont, 89 m. SW by S of Montpellier, drained by Battenkill river and Roaring brook, and intersected by the Western Vermont railroad. Pop. in 1850, 479.

**SUNDERLAND-BRIDGE**, a township in the p. of St. Andrew-Auckland, co.-palatine of Durham, 32 m. S of Durham. Pop. in 1831, 283; in 1851, 204.

**SUNDERLAND (North)**, a township in the p. of Bamfrough, Northumberland, 7 m. ESE of Bedford. It possesses a small port. Pop. in 1851, 1,208.

**SUNDEWIT**, a small district of Denmark, in the duchy of Sleswig, and SW part of the bail. of Sonderburg and Nordburg. It comprises an area of 18 sq. m., and contains six parishes. Pop. 2,770.

**SUNDGAU**, an ancient district of France, in Alsace, and now comprised in the S part of the dep. of the Haut-Rhin. Its capital was Befort.

**SUNDHEIM**. See **SONTHEIM**. See also **KALTEN-SUNDHEIM**.

**SUNDHOFEN**, a village of France, in the dep.

of Haut-Rhin, cant. and 1½ m. S of Andolsheim, on the Ill. Pop. 1,000.

**SUNDHOUSE**, a village of France, in the dep. of Bas-Rhin, cant. and 8 m. E of Magkolsheim, and near the canal between the Rhine and Rhone.

**SUNDI**, a prov. of Lower Guinea, to the N of Congo. It is watered by the Zaire, and is very fertile. The mountains contain copper, and rock-crystal. The capital, which bears the same name, is on the Zaire, 18 m. below the cataract.

**SUNDIA**, a town of Sind, on the E side of the Indus, on the route from Tattah to Hyderabad.

**SUNDILA**, a town of Hindostan, in the prov. of Oude, district and 36 m. NW of Lucknow.

**SUNDIP**, an island of Hindostan, in the gulf of Bengal, 36 m. E of the embouchure of the principal or eastern branch of the Ganges. It is 15 m. in length, and 9 m. in breadth, and is approachable on all sides except the N. Its soil, which consists of alluvial deposits of long accumulation, is very fertile. The government have an establishment here for the manufacture of salt under the Bulwa and Chittagong agency. On the expulsion of the Portuguese from Aracan in 1607, they established themselves in this island, and addicted themselves to piracy. They were expelled by the rajah of Aracan. The island subsequently fell into the hands of the Moguls.

**SUNDON**, a parish in Bedfordshire, 4½ m. NW by N of Luton. Area 2,160 acres. Pop. 464.

**SUNDRIDGE**, a parish in Kent, 3 m. W by N of Seven-Oaks. Area 4,041 acres. Pop. 1,642.

**SUNDSVAL**, a town of Sweden, in the laen and 30 m. SW of Hernosands, on the Selangers-A, at the head of a small bay formed by the gulf of Bothnia, and enclosed by lofty mountains. Pop. 2,100. It has a good port, is regularly built, and carries on an active trade in linen, timber, game, hides, cheese, &c. On an adjacent hill at the extremity of a fine alley of sycamores, is the Chateau-de-Frolick.

**SUNDUM**, a village of Afghanistan, between the Indus and Sewat, and about 80 m. N of Attock.

**SUNDY**, a town of Hindostan, in the district of the Northern Canara, 54 m. NE of Onore. It was formerly large, populous, and well fortified. In 1763 it was taken, and its ramparts destroyed by Hyder Ali. The surrounding country is well cultivated, and produces in great abundance, pepper and timber. In 1799, it was ceded by the Portuguese to the English.

**SUNEL**, a town of Hindostan, in Malwah, in N lat. 24° 33', 76 m. N of Ujein.

**SUNERGONG**, a town of Bengal, situated between the Luckia and one of the branches of the Brahmaputra, in N lat. 23° 39'. It is the capital of a district of the same name. At a period when Dacca was scarcely if at all known, S. was a large and flourishing city, famous for its manufactures of muslin and other fine cottons. The time in which S. was at the height of its prosperity was during the first 42 years of the 13th cent., and the numerous mosques and other buildings, of which the ruins are still remaining here, were constructed during that period. The city of Dacca having risen on the downfall of S., the latter is now reduced to a mere village, principally inhabited by weavers.

**SUNFISH-BANK**, a large and interesting fishing-bank off the W coast of co. Mayo. Its centre is situated 12 m. NW by W of Innisboffin, and 15½ m. WSW of Clare island. This bank is remarkable from the break of the tide on it, with ebb and flood, and is supposed to be a ridge of land extending from the Blaskets to Erris head, in about 70 fath. It is frequented in spring by the sunfish or basking shark, the best season being the last week in April, or first in May.

**SUN-FLOWER**, a county in the NW part of the state of Mississippi, U. S. It comprises an area of

824 sq. m., and is drained by a river of the same name. It has a level surface, and produces considerable quantities of cotton. Pop. in 1850, 1,102. Its capital is M'Nutt.

SUNGARIA, or DZOUNGARIA, a region of Central Asia, forming a basin, or concave plateau, bounded on the N by the Kirghissian mountains and the Little Altai, which separate it from Western Siberia; on the east by the Bogdo-Alin, asserted by the Mongols and Eluths to be the highest summit of Central Asia; on the S by the Alak-Tagh or Alak-Ula, which is connected at its E extremity with the Great Bogdo; and on the W by the northern continuation of the Belur-Tagh, which separates it from the country possessed by the great Kirghissian horde. Of its longitudinal extent, it is impossible to speak accurately: we only know that it is a very extensive as well as lofty region, reaching perhaps from the 75th to the 100th deg. of E long., or about 1,200 m. in the lat. of 45°; and from 43° to 52° N lat. in its greatest breadth, or 620 m.; the breadth and length are far from being regular; and the superficies of the whole may be about 700,000 sq. m. The name Sungaria, is Mongolian, signifying 'the Country to the left,' in opposition to Tibet, which is denominated *Baronthala* or *Barohn-dja*, 'the Country to the right' or to the south. The name *Sungari*, applied to that branch of the Eluths who possess this region, is taken from the country so called by the Mongols, or, in other words, the region does not derive its name from them, but they from it. The Chinese call it *THIAN-SHAN-PELU*. There can be no doubt that this region, though in the same latitude of France, is much colder, from its high elevation and the various ranges of lofty mountains which rise on the base of its plateau. The elevated region called Kankaragay by D'Anville, in which the Irtysh has its source, must have a rigorous climate, as the Bogdo and other ranges in its vicinity are covered with perennial snow. The Chahan-Tala, or 'White plain,' to the W of the Sanghin-Talghin lake, or 'Windy sea,' must also be very elevated, and is, perhaps, one of the highest in the N part of Central Asia; but after what we now know of the prodigious elevation of some of the Tibetan uplands, we demur to Malte Brun's opinion, that it is one of the most elevated in the old world; we are of opinion that, after passing the Muz-Tagler, or N boundary of Western Tibet, the uplands will be found to begin to decline in elevation; the plateau of the Lesser Bukharia being lower than that of Tibet, and higher than that of Sungaria; which latter, in its turn, overlooks the terrace which separates the Great Altai from the Lesser Altai. Thus from the Muz-Tagler and the Kwanglung, there is a succession of sloping plateaus northward, each lower than the other, till we reach the S confines of Western Siberia. What we say on this point is, however, mere conjecture, as we have no facts on which to ground our opinion; and, if the plateau in the vicinity of the source of the Korgon, and bounding Sungaria on the N, have 7,000 ft. of elevation, according to Ledebuhr—who explored the terrace of the little Altai to the very borders of this region—S. must be a very lofty region. But hitherto Chinese jealousy has prevented all discovery in Central Asia.

*Mountains.* This region is traversed in various directions by many mountain-ranges, of which the names only are known. The principal range is the Altai-Alin, or 'Golden mountain,' called by the Russians the Great Bogdo, which is as it were the central knot of Asia, being at almost an equal distance from the Caspian, the Icy, the Chinese, and the Indian seas, and the grand culminating point whence

all the rivers of Central Asia flow to different quarters except the S. Its direction seems to be from NW to SE; and it bears various names in different parts of its course, from the various nomadic tribes which at different periods roamed in its vicinity. By the Jesuit missionaries, this range is called Hangay-Alin; by others Khanggai or Han-hai. Remusat observes that Han-hai is one of the names which the moderns give to the Cobi or great sandy desert; but he further remarks, that Han-hai was anciently the Chinese name of a lake in Tartary, very probably one of those which abound in the mountains of Altai; and it was for that reason that, in the 7th cent., when Taytsong, after the Chinese manner divided the Whey-he country into *fus* and *chus*, he gave the title of Han-hai to that region where dwelt the tribe properly called Whey-he. When we reflect that the rivers Selingha and Orchon, especially the latter, have full 400 m. in direct distance from their sources in the Altai to run, before the confluent stream enters Siberia at Kiakhta, and that Kiakhta itself is 2,560 ft. above the level of the sea, we may form some idea of the elevation of the Altai. From this range a great many branches are sent off in various directions under as various names. The upper course of the Irtysh is flanked on both sides, before it arrives at the Saissan lake, by the Bogdo on the right, and the Chamar-Daban on the left or S. The latter river runs E and joins the Ui-Daban. To the S of the Chamar-Daban is a high level watered by the Bortal river, which runs E, and is lost in a lake. Another range separates this upland from that watered by the Ili, which, in its turn, is separated from the Lesser Bukharia by the Alak chain. Another range, called the Malhan-Alin, separates the basin of Lake Kirkir from that of the Ursa lake.—In the number of its lakes, the plateau of S. bears a strong resemblance to that of Tibet. This region seems indeed to be composed of a great number of concavities of greater or less dimensions, either surrounded by mountain-groups or bordered by mountain-chains, in which most of the rivers of this region are lost. Of these—if we can trust the Jesuits' map, made solely from itineraries or native report—the basin of the lake of Kirkir, in the centre of S., is the largest. This basin is watered by a large stream descending SW from the Malhan-Alin, and then running NW to that lake, into which it enters after a semicircular course of 300 m. To the SW of this is the Ekearal lake, fed by two streams descending N from the Hopto, and communicating with that of Kirkir by means of a large stream which it sends off to it in a NE course. On the NW of the Kirkir lake is that of Ursa, into which the Teiz-Pira descends from the NE. In the eastern extremity of S., and in the very heart of the Altai, is the large lake of Sanghin-Talghin, surrounded with lofty mountains; and a little to the SE, is the Uljeyai-Chahan-Omo, the source of the Shilotu, the chief branch of the Selingha. On the S side of Sungaria are the lakes of Kisaibas and the Chahan-Omo. It is probable that the Chahan lake at the source of the Shilotu, NW of Karakorum, was the Cianga lake of Marco Polo, where the grand khan had a summer-palace. It abounded with swans, pheasants, cranes, partridges, and quails; but as it was too cold in winter, it could only be visited in summer.—In the western extremity of S. is the Balkhash, or Palkasi-Nor, a large basin of water, said to be 15 days' journey in circumference; but no two maps agree in the long. of this inland fluid expanse; some placing its eastern extremity in 77° and others in 72° E long. Rubruquis and Plano Carpine passed by this lake in their way to Karakorum, and say that so violent gusts of



wind blow from the surrounding country as to blow travellers into the lake. The mountains to the W of this lake form the western limit of S. To the E of this lake is a range of mountains which separate it from the Alaktukol and the Kinre, into the latter of which, through a gorge of the mountains which shut up this concavity, descends the river Imil from the E.—Another large lake is that of Soissan, called also Honhotu-Nor, said to be 90 m. long from E to W, and 40 m. from N to S, in  $47^{\circ} 30' N$  lat. and  $84^{\circ} E$  long. at its eastern extremity. NE of this lake is the Altin-kol, or 'Golden lake,' called by the Russians Teletskoy-Ozero, or 'the Lake of the Telessi,' from a Kalmuck tribe which inhabits the vicinity. It lies in very elevated ground, and is surrounded with mountains. The N part is sometimes so hard frozen as to be passable on foot; but the S part never freezes. The N end of this lake is fixed in  $52^{\circ} N$  lat., and in  $83^{\circ} 30' E$  long., according to some maps. By some this lake is placed within the Russian limits. The Petersburg academy's map places it in S. Strahlenberg identifies this lake with that of Kikir above mentioned, and the Balkash lake with the Tshui lake of his map. Compared with other regions of Central Asia, S. seems to be well-supplied with rivers, as, independent of those which are absorbed in lakes, the three largest rivers of W. Siberia originate in this region, and water no small portion of surface: namely, the Irtysh, the Oby, and the Jenisei. As with the mountains and lakes, we know little more of the Sungarian streams than their names; for, since the days of Carpin and Ruysbroeck, no European has traversed this country, and even Russian knowledge of it, so far as reported, is still confined to the N of the Altai. The Irtysh, near its source, is composed of two small streams, called the Char-Irtysh and Chor-Irtysh, or 'the Black' and the 'Red Irtysh,' which originate at the foot of the Great Bogdo, in  $93^{\circ} E$  long., and  $46^{\circ} N$  lat. These two small lakes are said to be 30 m. asunder. After a long descent of more than 400 m., amongst a very elevated plateau, in a WNW direction, it enters the Saissang lake, and issuing thence turns northward, and enters Siberia opposite the fort of Bukhtarma, the most advanced Russian station towards the S. Its course through S. is upwards of 550 m. in a direct line.—To the NE of the Upper Irtysh is the source of the Oby, in  $48^{\circ} N$  lat. and  $96^{\circ} E$  long., at the foot of the Great Bogdo, where it is called the Shabekan. Under that name it runs NW to the Altin Nor, or 'Golden lake,' issuing thence, under the name of the By, it enters Siberia in  $52^{\circ} N$  lat. and  $88^{\circ} 44' E$  long. according to the map of the Russian academy, after having also performed a course of 550 m. through S. It is not till after its junction with the Khatoonya that it is called the Oby. The Jenisei is composed of two small streams, the Bei-Kem and the Oula-Kem, the latter of which is separated from the upper course and source of the Shabekan by a range of mountains on the S. Both these branches originate in the NE angle of S., from the W base of the Great Bogdo, which separates them from the sources of the Selingha. After running W for a small space, the two streams unite under the name of the Kem, in  $51^{\circ} 30' N$  lat., and  $95^{\circ} E$  long. Its true name is the Kem, and not the Jenisei or Enisei, which is the Tungusian appellation. As its whole course through S. is in a mountainous and rocky tract, it is not navigable; and on account of its numerous cataracts and stony bottom it produces no fish. The next and last large river of consequence is entirely a Sungarian stream, and is called the Ili or Eli. This river is composed of two main branches, the Tekis and the Eli, both which rise in the Alak-

Tagh, in  $83^{\circ} E$  long., according to the Jesuits' map, and in  $44^{\circ} N$  lat., near the pass of Kdionghis; it is on that account called also the Khonghis river. This stream is made first to run 150 m. NW, and then 150 m. N, till it falls into the Balkhash lake. The Tekis rises considerably to the W of the Ili, and having run 70 m. N it enters the latter by several mouths. The mouth of the Ili is fixed by that map in  $48^{\circ} N$  lat.

We must confess that we can give no other account of the soil and produce of S. than that it is a pastoral country. As to cities, there are none that are marked on the map, but Munas Hotun, and of it we know nothing. We, indeed, read of several cities having once existed in the days of the Oigours and Turks, as Imil, Almatu, Almalig, and Bishbalig, all Turkish names; these cities lay in the southern part of S., on the confines of Little Bukharia, but they are said to be now in ruins. Who were the original inhabitants of this region, none can tell; but it is plain from history that it has been inhabited by different races of wandering hordes at different periods, and perhaps at the same time. The Kirghis dwelt on the banks of the Jenisei before the time of Jenghis Khan; the Virats or Eluths, the ancestors of the present race, inhabited the region of the Sekir Muran, or 'Eight rivers,' that fall into the Jenisei from the E. They now dwell to the W of the Belur and the Irtysh. See article ELUTHS.

SUNGAU, a river of Afghanistan, in the valley of Pishin, which has its source at the S base of the Toba mountains, runs W and falls into the Lora. About 20 m. above, where it is crossed by the road from Candahar to Guetta, it has a width of about 8 yards, and an alt. of about 5,000 ft. above sea-level.

SUNGHUR, a town of Hindostan, in Gujerat, district of Surat, in N lat.  $21^{\circ} 8'$ .

SUNGIE-TENANG, a country in the interior of Sumatra, between the 2d and 3d parallels of S lat., bounded on the NW by Korinchi and Serampi; and on the E by Batang-Asei and Pakalang-jambu. The general produce of the country is maize, padi, sweet potatoes, tobacco, and sugar-cane; the valleys on the whole are well cultivated. It is inhabited by a stout-built dark-complexioned race of people, many of whom leave their country to seek employment where they can find it, and at the end of three or four years revisit their native soil, bringing with them the produce of their labours. If successful, they become itinerant merchants, and travel to all parts of the island, particularly where fairs are held; or they purchase a matchlock-gun, and become soldiers of fortune, hiring themselves to whoever will pay them, but always ready to come forward in defence of their country and families. Their houses are built on posts. Every village has a common hall about 120 ft. long, and broad in proportion, the wood-work of which is neatly carved. The dwelling-houses contain five, six, or seven families each.

SUNGIE-UJONG, a state of the Malay peninsula, lying between the parallels of  $3^{\circ}$  and  $3^{\circ} 30' N$ . Its chief export is tin.

SUNG-KE, a district and town of China, in the prov. of Fo-keen and div. of K'een-ning-fu, in N lat.  $27^{\circ} 36'$ , and E long.  $118^{\circ} 46'$ .

SUNG-KEANG-FU, a division and town of China, in the prov. of Keang-su. The div. comprises 8 districts. The town is 150 m. SE of Nan-king, in N lat.  $31^{\circ}$ , and E long.  $120^{\circ} 57' 4''$ . It is noted for its cotton manufactures.

SUNGLAKHL, a village of Afghanistan, at the S base of the Pugman mountains, on an affluent of the Cabul, and about 30 m. W of the town of that name.

**SUNGNAM**, a town of Kunawur, in the valley of the Sutledge, in N lat.  $31^{\circ} 45'$ , about 8 m. to the N of the Runang pass, at an alt. of 9,000 ft. above sea-level. It contains numerous Buddhist temples and monasteries, and the vicinity presents considerable cultivation.

**SUNGRAR**, a village of Sind, about 12 m. SE of Roree, near the l. bank of the Narra.

**SUNG-SZE**, a district and town of China, in the prov. of Hu-pih, and div. of King-chu-fu, in N lat.  $30^{\circ} 26'$ , and E long.  $111^{\circ} 34'$ .

**SUNGUR**, a village of Sind, 30 m. NNW of Larkhana.

**SUNG-YANG**, a district and town of China, in the prov. of Chi-keang, and div. of Chu-chu-fu, in N lat.  $28^{\circ} 27'$ , and E long.  $119^{\circ} 27'$ .

**SUNK-ISLAND**, an island on the coast of Yorkshire, which has been gradually formed by the accretion of the warp or soil deposited by the Humber. It belongs to the Crown, and was first granted on lease, in 1669, at a rent of £5 per ann., when it was described as containing 3,500 acres of "drowned land." This area, increasing every year in extent, was secured by additional embankments from time to time, by which, in 1851, 11,760 acres had been reclaimed, which were then divided into 15 farms, in a high state of cultivation, and paying a rent of £9,140. Pop. in 1831, 242; in 1851, 310.

**SUNNABAHE-BUNGA**, a village of the Punjab, near the l. bank of the Ghara, and 90 m. ESE of Multan.

**SUNNEWEH**, a village of the Punjab, on an off-set, and to the E of the Indus, 20 m. NNE of Dera Ismail Khan.

**SUNNI**, a village of Cutch-Gundava, 40 m. N of Gundava.

**SUNNINGHILL**, a parish in Berks, 6 m. SSW of New Windsor, bordering on Ascot-heath. It contains many beautiful villas, and is celebrated for its mineral waters, which are much frequented during the summer. Area 3,173 acres. Pop. in 1851, 1,350.

**SUNNINGWELL**, a parish in Berks,  $2\frac{1}{2}$  m. N of Abingdon, bounded on the E by the Thames. Area 1,298 acres. Pop. in 1831, 339; in 1851, 290.

**SUNO**, a village of Sardinia, in the div. and prov. and 15 m. NNW of Novara, near the r. bank of the Terdopio. Pop. 1,815.

**SUNTEL**, a range of mountains, extending along the confines of Hanover, and of Electoral Hesse, at the eastern extremity of the circle of Schanenburg.

**SUNTGAU**, a district of France, in the ancient prov. of Alsace. Its capital was Belfort.

**SUNTPUR**, a village of the Punjab, 26 m. NNW of Lahore.

**SUPENAM**, a river of British Guayana, in the co. of Essequibo, which, after a short course towards the E, flows into the river of that name opposite the island of Wakenham. On its banks are several commercial establishments chiefly for timber.

**SUPERBE**, a river of France, in the dep. of the Haute-Saône, which has its source in the cant. and 2 m. E of Vauvillers; runs SSW; passes Amance; and, after a course of about 15 m., joins the Saône, on the l. bank, 4 m. W of Faverney.

**SUPERGA**, a mountain of Sardinia, in the div. and prov. and 4 m. ENE of Turin, near the r. bank of the Po. On its summit is a magnificent church. It is circular in form, supported by marble pillars, and surmounted by a dome. The interior is adorned with sculptures, and the pavement with different colours of marble. It is the place of sepulture of the royal family.

**SUPERIOR**, a township of William's co., in the state of Ohio, U. S. Pop. in 1840, 166.—Also a township of Washtenau co., in the state of Michi-

gan, 31 m. W of Detroit, drained by Rouge and Huron rivers. Pop. in 1840, 1,127; in 1850, 1,398.

**SUPERIOR (LAKE)**, the KITCHIGAMHI, or MISISIAWGAIEGON, of the Indians, and LAC SUPERIEUR of the French, a lake of North America, the largest body of fresh water which has yet been discovered, and the most elevated of the great American lakes. It lies between the parallels of  $46^{\circ} 26'$ , and  $49^{\circ} 1'$  N, and the meridians of  $84^{\circ} 18'$  and  $92^{\circ} 19' 20'$ , being skirted on the N and E by the British territories; on the S and W by the states of Michigan and Huron. The boundary line between the British and American possessions passes from the outlet of the lake through the middle of its E section, and towards the W is carried to the N of Isle Royale. Passing round to the W extremity of the island, it runs S to the entrance of Pigeon river. Lake S. is an irregular basin of a somewhat triangular form; its greatest length measured from Point Iroquois, at the mouth of the St. Mary, to the mouth of the St. Louis at the Fond-du-Lac, is 541 m.; its mean breadth 141 m.; and its circumf. is about 1,200 m. Its area has been estimated at 32,000 sq. m. Its alt. above sea-level is 596 ft. according to Mr. Hodgson; but 617½ ft. according to Bersby; its depth varies from 80 to 200 fath. It is remarkable for the transparency of its waters, as well as its extraordinary depth. Its N coast, indented with many extensive bays, is high and rocky; but along the S shore the land is generally low and level, though occasionally interrupted by abrupt limestone ridges. A sea almost of itself, it is subject to many vicissitudes of that element; for here the storm rages, and the billows break with a violence scarcely surpassed by the tempests of the ocean. In the distant range of mountains that form the land's height beyond its N and W shores, several considerable rivers, and numerous small ones, have their rise, which, increased in their course by many small lakes, finally discharge themselves into Lake Superior. To the southward also there is another lofty range dividing the waters that find their way to the gulf of Mexico, through the channel of the Mississippi, from those that take a northern course into this great lake, the entire basin of which has been estimated at 100,000 sq. m. From near the W end of the lake, the elevated ground sinks southwards and eastwards in a series of successively descending terraces. On its N and NE sides there are several islands, of which one called Isle Royale is the largest, being 45 m. long and 9 m. broad. Out of the SE angle of Lake S. a very rapid current, interrupted and broken by many small islands, or rather huge masses of rock, flows with a fall of 22½ ft., through a channel 27 m. in length, at the end of which it flows into Lake Huron. The falls or rapids of St. Mary, nearly midway between the two lakes, are formed by the impetuous stream of the enormous discharge from Lake S., the recipient of 220 rivers and brooks, forcing its way through a confined channel, and breaking with proportionate violence through the impediments that Nature has thrown in its way. A canal has been cut by the North-west company along the N bank, for the purpose of facilitating their commerce, and they have here a considerable establishment; but their chief fort and storehouses are situated at Kamenestiquia, on the banks of a river which flows into Lake S., on the NW side, and which affords an easy communication with the interior. A ship-canal, for avoiding the rapids, is in progress on the American side of the lake. The strait of St. Mary, it is supposed, does not discharge one-tenth of the waters which the lake receives from its numerous rivers; how the remainder is discharged, or whether it escapes by evaporation, re-



mains a secret. It does not appear, however, that an exact calculation has hitherto been made, either of the quantity discharged, or of the quantity received. The lake abounds with fish, particularly trout and sturgeon, which may be caught at almost any season in the greatest abundance. The trout in general weigh about 12 lbs.; but some are caught that exceed 50 lbs. Besides these, a species of white fish, that resemble a shad in their shape, but are rather thicker, and weigh about 4 lbs. each, are taken in large quantities.—Immense deposits of copper exist in the vicinity of this lake, both on the American and the Canadian side, and on the islands. According to the report of Mr. Jackson, this mineral exists here in two great deposits, one towards the N extremity of the state of Michigan at Keweenaw-point, which forms a projecting headland towards the middle of the S shore of Lake S., and the other in Isle Royale, situated about 50 m. N of Keweenaw-point. This island, which ranges NE and SW, lies exactly parallel to Cape Keweenaw, and to the strike of the beds of which it is composed; it presents also a geological construction identical with that of the shores of the lake. The two deposits occur in the same formation, and under circumstances precisely similar. Mr. Jackson's geological map shows that the Michigan shore of the lake consists of granite, trappean rock, and red sandstone belonging to the lower Silurian series. The trap is composed, according to Mr. Jackson, of an aggregate of crystals of hornblende and feldspar, mingled with crystals of magnetic iron ore; there are also found, occasionally, prenite, datolite, laumonite, chlorite, and laminated calc-spar. The sandstone and trap form parallel bands, running due NE and SW. At Cape Keweenaw the sandstone is seen to the r., and the trap to the l. At Isle Royale the S shore is the only one on which the sandstone can be traced, so that from this arrangement the trap would seem to form two parallel bands. The separation of the sandstone and trap is marked by a conglomerate, called by Mr. Jackson, trap-tuff, which consists of fragments of sandstone, compact trap, melted trap, amygdaloid, and sometimes pebbles of old rocks. The cavities are filled with chlorite, agates, laumonite, pectolite, and laminated calc-spar, in small concretionary nodules, the size of which varies from that of a grain of millet to a musket ball. The surface of the included calc-spar and agate is covered by a film of chlorite, so that when first removed they look like small nodules of chlorite, and their true nature can only be determined by breaking them. It has been noticed in the course of the operations carried on by the Lake Superior company, that when the cavities were filled with chlorite nodules, "there was always a grain of copper in the centre. Elsewhere, and near the veins of copper, the included minerals in the same amygdaloid were occupied by copper or native silver, or by these two metals at once." Native copper and silver are found at Cape Keweenaw and Isle Royale, only in the trap formation, all the important veins forming together a narrow zone in the amygdaloid. At Keweenaw-point the cupriferous zone may be about 120 m. in length; and in Isle Royale it ranges through the whole extent of the island, which is about 45 m. long. The richer portions are unequally distributed. Metallic copper is chiefly found in the N zone at Keweenaw-point, while in the S the copper is in a state of sulphuret. Mr. Jackson states that he has seen a mass of copper ore 20 ft. long, 9 ft. wide, and from 4 to 6 in. thick taken from the Copper-Falls mines. The mass weighed about 10 tons. These masses of large dimensions are not rare, and to give an idea of the richness of

the mines and the expense of working them, Mr. Jackson states in a report, dated 26th September, 1848, "that the produce of the mines for one year had been nearly 43 tons (95,994 lbs.) of ore containing 70 per cent. of metal, or about 30 tons of copper in all. This produce was the result of the labour of 33 men, of whom 20 were miners and the rest labourers." Among the masses of copper obtained from these mines, he mentions four whose respective weights were 7,018, 7,484, 7,678, and 14,000 lbs.

SUPEXHE (LA), a commune of Belgium, in the prov. of Liege and dep. of St. Reny. Pop. 214.

SUPINO, a town of the Papal states, in the deleg. and 8 m. WSW of Frosinone. Pop. 1,050.

SUPRASLIA, a village of Russia in Europe, in the prov. and 8 m. NE of Bialistok.

SU-PU, a district and town of China, in the prov. of Hu-nan and dep. of Shin-chu-fu, in N lat. 27° 50', E long. 110° 20'.

SURA, a village of Sweden, in the prefecture and 15 m. NW of Westeras and haerad of Saeefringe, on the Kolbaeck-an. It is enclosed by walls, and formerly contained a pagan temple.

SURABAYA, or SOERABAYA, a province of Java, bounded on the N by the sea of Java; on the E by the straits of Madura; on the S by the provs. of Passeroean and Kediri; and on the W by Samarang. It administratively comprises the island of Madura. It is fertile in cotton, sugar, rice, coffee, indigo, and potatoes. The pop. in 1845 was estimated at 970,000.—Its cap. of the same name is situated in S lat. 7° 14' 30", about 1½ m. from the shore of the strait of Madura. The Calimas river, which once emptied itself into a marsh close to the town, has of late years been banked up, and a trackway made along its side for tracking boats, which also confines its course and greatly adds to its depth and current. This river, which has here a breadth of 30 yds., separates the European part of the town from that of the Chinese and the native quarter. A bridge, with draw-chains to raise it for the passage of vessels, connects the European or Dutch town with that of the natives. The house of the resident is a handsome building, close to the river; and near to it is the general hospital, about 2 m. from the town, situated on the banks of the river. The number of houses is about 9,000, of which above 1,000 are built of stone or brick. In proportion as the neighbouring town of Grissik has fallen into decay, the new town of S. has risen in pop. and prosperity. A fine arsenal, and other extensive works, calculated for equipments on a large scale, were formed here by Governor Daendels. Vessels also, with their various appointments, are built and equipped at S., in the neighbourhood of which are considerable forests, whence good timber is easily procured, and is floated down the river. The exports of this place consist of indigo, sugar, hides, timber, rice, and edible birds'-nests. The pop. in 1850, was estimated at 50,000, of whom a considerable proportion are native Christians.—The situation is considered healthy. The harbour of S. is the only secure one on the N coast of Java. The mouth of the river on which S. is situated, is defended by Fort Calimas, a circular battery placed on a rising spot on the E side of the river. This battery has a commanding sweep across the strait of Madura, which is narrowest here, being opposite to the SW end of the island of that name. The eastern entrance into the straits of Madura being impassable for large ships, the batteries there are less formidable; but the NW entrance is defended by Fort Ludowyk, at the extremity of an island or mud bank projecting into the channel, about 1,400 yds. from the island of Manarie. Fort Ludowyk is dis

tant from Grissik about 6 m., and from Point Panka 5 m., and is situated immediately on the narrow winding channel by which alone large ships can enter. It presents a low and very formidable battery of 100 pieces of ordnance, mounted on traversing carriages, besides some heavy mortars.

**SURA-CORTA**, **SOERABARTA**, or **SOLO**, a town of Java, the capital of a district, and the residence of the *socoehwenan* or emperor, situated 140 m. WSW of Surabaya. It is a large and populous town, intersected with broad and shaded avenues or streets, running at right angles. The *crattan*, in which the emperor resides with his court, is spacious, and comprises several palaces within its area. The other chiefs and nobility live in villas surrounded by high walls, which are interspersed through the town and neighbourhood. The European or Dutch town and fort are neat. Close to the fort is the resident's house, which is a large and handsome building. An educational institute was founded here by the Dutch government in 1832. Pop. 100,000. A river, also named the Solo, which flows near the town, and falls into the harbour of Grissik, affords, in the rainy season, ready conveyance for the various productions of a large tract of country, in exchange for commodities which are sent up in boats from the coast.—The province of S. is bounded on the N by that of Samarang; on the E by Madioen; on the S by the Indian ocean; and on the W by the prov. of Djoejakarta. It is chiefly composed of an extensive and fertile valley, yielding rice, cotton, coffee, tobacco, and sugar. The pop. was estimated in 1845 at 400,000.

**SURACZ**, a town of Poland, in the woiwodie of Augustow, obwod and 44 m. SE of Lomza, on the Narew. Pop. 700.

**SURAN**, a river of France, which takes its rise in the dep. of the Jura, cant. and 5 m. WSW of Orgelet; waters the cantons of Treffort, Ceyseriat, and Pont-d'Ain; bathes Chavanne; and after a course in a generally S direction of about 39 m., joins the Ain on the r. bank, 1½ m. SW of Pont-d'Ain.

**SURANG** (KET), a town of Hungary, in the com. of Eisenburg, and 12 m. SE of Guns.

**SURANO**, a town of Naples, in the prov. of the Terra-d'Otranto, district and 23 m. E of Gallipoli, and cant. of Poggiardo, in a wide plain. Pop. 520.

**SURANOTERANO**, a village of the Punjab, on the r. bank of the Ravee.

**SURANY** (NAGY), **SCHURAU**, or **WELKE-SURANY**, a town of Hungary, in the com. and 18 m. SSE of Neutra, on the l. bank of a river of that name.

**SURAT**, a large and populous city of Hindostan, in the prov. of Gujerat, in N lat. 20° 10', on the S bank of the river Tapti, about 20 m. from its embouchure, in the gulf of Cambay. Its walls have a circuit of about 6 m. Its present pop. is about 160,000, of all nations and religions, but chiefly Hindus. S. is situated on a fertile plain, protected on one side by the river, and on the three others by a brick rampart and ditch. It also possesses a strong citadel, situated on the bank of the river, and surrounded by an esplanade. The English East India company obtained permission from the Mogul emperor, Jehangire, in 1612, to establish their first factory in Hindostan, at this place. The Dutch and French acquired the same privilege a short time after. At that period its articles of commerce were diamonds, pearls, gold, musk, ambergris, spices, indigo, saltpetre, silk and fine cotton manufactures, both plain and coloured; but since the rise of Bombay, the value of the traffic of S. has vastly declined, and now consists chiefly of raw cotton, a few of its own manufactures, and a few articles imported from Gujerat. Of the ancient history of S. under the Hindu

dynasties, we have no authentic records. It was taken by the Mogul emperor, Akbar, in 1572, after a vigorous siege of 47 days. In 1664 it was surprised and plundered by the Mahratta chief Sevajee. On the decline of the Mogul authority, when the governors of each province, taking advantage of the general confusion, aimed at establishing their own independent authority, one of the parties called in a body of Mahrattas to his assistance, and assigned to them a third part of the customs of the port, while the English and Dutch factories, espousing opposite sides, assisted them with ammunition and cannon. After various contests, Moyin Addin, the governor of the city, finding himself unequal to the reduction of the citadel, offered to cede the place to the British, provided they would assist him to expel his rival. This proposal was accepted by the Bombay government, and a civil servant, named Spencer, was sent, in 1759, with a considerable force, to effect this object. On their arrival at S. they were admitted into the town, and in a few days compelled the garrison to capitulate. The British took possession of the fortress, but in the name of the emperor of Delhi, from whom they shortly after obtained, in the name of the East India company, the commissions of governor of Surat, and admiral of the Mogul fleet, with an assignment on the duties and customs, of £25,000 per annum, for the support of the marine and citadel. Nasir Addin, shortly after his succession in 1800, entered into a treaty with the British to resign all his authority for the payment of an annual sum of £12,500, and a proportion of the extra revenue that might thereafter be collected. The successes of the British against the Mahrattas in 1803 also compelled them to relinquish all claims on S. The Great Central Indian railway will connect Bombay with Agra, by way of Surat, Baroda, and Nimuch; and it has been proposed to construct a branch-line from Surat, along the valley of the Tapti, into the cotton-districts of Candeish and Berar.

**SURBO**, a town of Naples, in the prov. of the Terra-d'Otranto, district and cant. and 5 m. NW of Lecce, in a plain. Pop. 1,580.

**SURCO**, a large establishment of Peru, in the intendency and 45 m. ENE of Lima, and prov. of Guarochiri, on the l. bank of the Rimac.

**SURE**, a river of France, in the dep. of the Drome, which descends from the mountains of St. Julien-Quint; runs S into a deep, narrow valley; and after a course of about 14 m., throws itself into the Drome on the r. bank, near the Croix. St. Julien-Quint is the chief place on its banks.—Also a commune of Belgium, in the prov. of Luxemburg and dep. of Nives. Pop. 144.

**SURE**, or **SAUER**, a river of Belgium, formed by the junction of several small streams, which descend from the Ardennes, and unite in the prov. of Luxemburg, dep. and 3 m. NW of Fauvillers, and near a small village of the same name. It passes the towns of Esch and Diekirch; forms for some distance the line of separation between the prov. of Luxemburg and the Prussian prov. of the Rhine; and after a sinuous, but generally E course of about 96 m., joins the Moselle on the l. bank, 5 m. WSW of Treves. Its principal affluents are the Alzette and Erens on the r.; and on the l., the Wiltz, Our, and Prum. Its navigation is considerably impeded by the numerous mills and fisheries which are established on its banks. Timber, iron, charcoal, grain, and wine, are its chief articles of transit.

**SURENDAL**, a parish of Sweden, in the dio. and 63 m. SW of Drontheim, and bail. of Romsdal, on the r. bank of the Suro-elv, a little above its entrance into the Surendal-fiord. Pop. 3,700.



**SURENEN**, a mountain of Switzerland, on the confines of the cant. of Uri and Unterwalden, and a little to the N of Tilles. It has an alt. of 7,170 Parisian ft. above sea-level.

**SURENES**, or **SURESNES**, a commune of France, in the dep. of the Seine and cant. of Courbevoie, 9 m. SW of St. Denis, pleasantly situated on the l. bank of the Seine, which is here crossed by a ferry, and at the foot of Mont-Velerien. Pop. in 1846, 2,159. It has manufactories of hosiery, bricks, tiles, and pottery, a calico printing-mill, a dye-work, and vinegar-works. The trade consists chiefly in wine. The com. contains numerous fine country-houses.

**SURFLEET**, a parish in Lincolnshire, 3 m. N of Spalding, including the hamlet of Belby. Area 3,500 acres. Pop. in 1831, 874; in 1851, 945.

**SURGERES**, a canton, commune, and town of France, in the dep. of the Charente-Inferieure, and arrond. of Rochefort. The cant. comprises 13 coms. Pop. in 1831, 12,649; in 1846, 13,207.—The town is 17 m. NE of Rochefort, in a narrow valley, on the Gere. Pop. in 1846, 2,191. It has distilleries of brandy of excellent quality, an oil-mill, and a tannery; and carries on an active trade in wine, brandy, grain, horses, cattle, and cloth.

**SURGY**, a town of France, in the dep. of the Nièvre, cant. and 4 m. N of Clamecy, on the Beuvron. Pop. 700.

**SURHUSTERVEEN**, a village of Holland, in the prov. of Friseland, cant. and 5 m. S of Buitenpost, in a marshy locality. Pop. 1,100.

**SUR-HUY**, a commune of Belgium, in the prov. of Namur and dep. of Gesves. Pop. 185.

**SURIA**, a town of Spain, in the prov. and 42 m. NW of Barcelona, and partido of Mauresa, partly at the foot, and partly on the slope of a mountain, and near the l. bank of the Cardoner. Pop. 750. It has several cotton and paper-mills; and in the environs are several salt-mines.

**SURICE**, a department and commune of Belgium, in the prov. of Namur and arrond. of Dinant. Pop. of dep. 837; of com. 360.

**SURIGAO**, a group of islands in the Philippine archipelago, to the SE of the island of Leyte, and to the NE of Mindanao, between 9° and 10° 25' N lat., and 125° and 126° 10' E long. The largest, named Dinagat, is in the N part of the group. To the W, between the islands of Leyte and Mindanao, is a strait of the same name. It is about 27 m. in width.—Also a town of the island of Mindanao, at the head of a bay, in N lat. 9° 47', E long. 125° 25'.

**SURMENA**, a populous town of New Granada, in the dep. of Boyaca, prov. and 105 m. SSW of Casanare, on the l. bank of the Meta.

**SURINAM**, a river of Dutch Guayana, formed by the junction of two streams, which descend from Sierra-de-Tumucuragua, and unite in S lat. 4° 15'. Thence it runs N; passes Paramaribo, and enters the Atlantic by a wide embouchure in S lat. 6° 10'; and after a total course of 345 m. Its banks in the upper part of its course are covered with impenetrable forests, but in the environs of Paramaribo, and thence to the sea, they present fine plantations, and are studded with country seats. At the confluence of the Commewyne, near the mouth of the S., is the superb fortress of New Amsterdam.

**SURINAM**. See **GUAYANA** (Dutch).

**SURIS**, a village of France, in the dep. of the Charente, cant. and 5 m. WSW of Chabanais, at the foot of a mountain, on the r. bank of the Charente. Pop. 700.

**SURJOUX**, a village of France, in the dep. of the Ain, cant. and 9 m. S of Chatillon-de-Michaille, near the r. bank of the Rhône. Pop. 200. In the vicinity is a mine of asphalt.

**SURLINGHAM**, a parish in Norfolk, 4½ m. ESE of Norwich. Area 1,767 acres. Pop. in 1851, 467.

**SURMELIN**, a river of France, which has its source in the dep. of the Marne, near Etoges; passes Montmain and Orbais; enters the dep. of the Aisne, and, after a total course of about 27 m., throws itself into the Marne, on the l. bank, 6 m. ENE of Château Thierry. Its principal affluents are the Veffun and Dhuiss. Its waters abound with fish. Wood is its chief article of transit.

**SURMONT**, a village of France, in the dep. of the Doubs, cant. and 7 m. SE of Colerval. Pop. 266. It has manufactories of fine woollen and cotton fabrics.

**SURNA-KOT-KILLA**, a village of the Punjab, about 10 m. E of Rajour.

**SURPIERRE**, or **UEBERSTEIN**, a village of Switzerland, in the cant. and 17 m. ESE of Friburg. Pop. 584. It has a castle.

**SURPRISE** (Point), a headland in N lat. 76° 2'. W long. 96° 55'. Captain Penny reports that having commenced his arctic explorations on 13th April 1851, in Wellington channel, he came upon water and decayed ice on the 15th May, in the channel between Cornwallis Land and Baillie Hamilton island, obliging him to return by the E of the said island, and then to the N, and having gained Point Surprise, the water washed the point at his feet, and extended 25 m. W, while the sky indicated water to the N round Dundas Island. "The moment," he says, "I stood upon Point Surprise, with a full view to the W, I exclaimed, 'Through this channel Sir John Franklin has gone in clear water. Oh! for a boat.' With this conviction on my mind I returned with the determination to use every exertion to get a boat up to this water. Again, on the 31st May, Capt. Stewart, having advanced as far as Cape Becher by the E side of the channel and along Albert Land, came to water, and from a height of 700 ft. found nothing but open sailing ice as far as the eye could reach, to the W and NW. On the 6th of June a boat was fully equipped, and a journey commenced for Victoria channel. On the 17th of the same month the boat was launched into the water in W long. 96°, and continued to contend for 33 days with adverse winds and rapid tides, which brought the drifting ice in such quantities to the eastward as to block up the various channels between the islands, leaving an open sea beyond, seen from the top of Baillie Hamilton's island. It is my conviction that the tide flows from the NW in Victoria channel, although there is a regular rise and fall of 4 ft.; still in mid-channel the current seemed to run the greater part of the twelve hours to the eastward, which, I have no doubt, was greatly influenced by the strong NW and WNW winds which prevailed for a whole month; but amongst islands and narrow channels one would require longer time for making observations to enable him to speak with certainty on this subject. In Davis's straits and Baffin's bay the tide flows from the S, in Lancaster Sound it flows from the E. On the 20th of June I saw narwhals, walrus, and white whales making their way down channel, seeking the protection of the ice, the same as I have seen in lat. 69° in Davis's straits. These animals migrate N at the same season every year for the same purpose, which is a convincing proof that a sea does exist beyond Queen Victoria channel, comparatively open and free from ice, and that they instinctively seek the protection of the ice, which remains longer in these narrow straits."

**SURREIN**, a village of Switzerland, in the cant. of the Grisons and valley of Summwx, 30 m. WSW of Coire. It has several mineral baths.

**SURREY**, an inland county in the SE part of England; bounded on the N by Berkshire, Buckinghamshire, and Middlesex; on the E by Kent; on the S by Sussex; and on the W by Hampshire. Its form is oblong from NE to SW; and its greatest length is 37 m.; breadth 27 m.; sq. area 759 m., or 485,760 acres.

*Divisions, &c.* This county is divided into 14 hundreds, viz. Brixton, Kingston, Wallington, Reigate, and Tandridge, forming the eastern parliamentary division; and Elmbridge, Copthorne, Effingham, Wotton, Blackheath, Godalming, Farnham, Woking, and Godley, forming the western parliamentary division. It is subdivided into 140 parishes, containing 1 county town, Guildford; 4 parliamentary boroughs, Southwark, Lambeth, Guildford, and Reigate; and 11 market-towns, Southwark, Guildford, Reigate, Haslemere, Chertsey, Farnham, Kingston, Godalming, Croydon, Dorking, and Ewell; Bletchingly, Epsom, and Lambeth, also were former

ly market-towns. There are numerous villages and hamlets in the co., and a new town. Kingston-upon-Railway, has recently been erected. Southwark and Lambeth form a very extensive portion of the metropolis. The population of this co. in 1801, was 269,043; in 1831, 486,334; in 1841, 582,613. The population of 1831 consisted of 109,077 families, 14,647 of whom were chiefly employed in agriculture, and 49,616 in trade, manufactures, and handicraft. The pop. in 1851 was 683,082. "The scenery of this co.," says Mr. Crayley, "exhibits much variety; forming, indeed, in some places, a complete contrast between beauty and homeliness. In many parts the landscapes are diversified with picturesque uplands, romantic heights, woodland dells, verdant valleys, and plains covered with waving corn; other situations present rocky hills and naked heaths, which yield but few attractive prospects to the curious traveller. The surface of the county is varied and undulating throughout almost the whole of that portion of the county to the N of the range of chalk hills which crosses it from the neighbourhood of Farnham, on the W to Godstone, and Tatsfield on the E. The N side of these hills, from which the land declines gently towards the vale of the Thames, forms the downs of Surrey; amongst which are scattered a multitude of verdant knolls, together with some loftier heights, whose summits yield many fine and varied prospects. The S side of the chalk hills is rugged and abrupt, broken into precipitous cliffs, remarkable for their height and romantic appearance. The N portion of the co. approaching the Thames exhibits much inequality of surface, and here are several eminences which yield extensive and rich prospects." The soil is various, and a good deal intermixed, especially in the N part of the district. Clay, loam, chalk, and heath, are the most distinct soils throughout the co. The most extensively uniform tract of soil is that which stretches along the whole S border; forming, with its continuation through Sussex and a considerable part of Kent, the district named the Weald.

*Climate.*] "It is a generally received opinion," says Mr. Allen in his *History of Surrey*, "that less rain falls on most parts of S. than in the metropolis, or in the vale of London, so that the climate may, upon the whole, be regarded as dry, so far as respects the quantity of rain merely; but the weald district must necessarily be moist and damp, from the nature of the soil, the flatness of the surface, and the immense number of trees which cover it and obstruct ventilation. The low parts near the Thames also partake of the same character. On the other hand, the atmosphere of the chalk hills is dry, keen, and exceedingly bracing. On the open heaths about Bagshot, Aldershot, and Hind-head, a similar climate prevails, so that the whole west side may, with a very small exception, be said to have a dry and rather cool atmosphere." At Norwood in this co., at an alt. of 350 ft. above sea-level, the maximum of the therm. in 1839 was 74°; the minimum 16°; the mean range 48°. On 198 days rain or snow fell; and 167 were fair. The prevailing wind was SW.

*Agriculture, &c.*] The produce of wheat lands in this co., is from 2 to 5 and sometimes 6 quarters an acre; that of barley 7½. Hops are extensively cultivated about Farnham, and in the SW portion of the co. In the weald one-third is arable, one-third pasture, and one-third waste and wood. In the vicinity of the metropolis, and on the sandy loam near the Thames, and about Mortlake and Barnes, garden pease and beans are extensively cultivated; and cabbages, carrots, potatoes, asparagus, &c., are grown in great quantities by the market gardeners and cowkeepers also in the vicinity of the metropolis. The whole quantity of garden ground in S., employed in raising vegetables for the London market, is estimated at about 3,500 acres; or, according to Middleton, nearly as much as in all the other three cos. surrounding London, namely Middlesex, Kent, and Essex. Medicinal plants, especially peppermint, lavender, wormwood, camomile, anise,

liquorice, and poppy, are also cultivated to a greater extent in S. than elsewhere in England; no less than 450 acres are thus employed in Mitcham parish and the adjoining district. There is a much smaller proportion of grass land in S. than in most other cos. in England. The most valuable and extensive meadow land lies along the banks of the Thames in the NW division of the co.—The cattle are of no particular breed. The horses employed by the farmers are in general large and heavy. The cows near the metropolis are chiefly of the Holderness or short-horned breed. Sheep are fed in great numbers in the central and western parts of the county. Geese are kept on the commons, especially in the weald. The Dorking breed of fowls is well known: they are large, handsome, and perfectly white, with five claws on each foot. With the exception of iron ore, the mineral productions of S. are not very valuable or extensive. Coal is said to have been formerly found in different districts, particularly near Cranley and Warpleston. Chalk is abundant, and is used in general as manure. In the vicinity of Godstone, Gattton, Merstham, Reigate, and Betchingley, are extensive quarries of excellent stone, calcareous and of a deep cream colour, first soft, and incapable of bearing the action of a damp atmosphere; but after being kept under cover for a few months, its texture becomes so compact that it can resist the heat of a common fire. The sand about Tandridge, Dorking, and Reigate, is in request for hour-glasses, writing, and a variety of purposes.

*Rivers, &c.*] The principal rivers of S., exclusive of the Thames, which only washes its N border, are Wey, the Mole, and the Wandle, all of them falling into the Thames. The Wey rises SW of Haslemere, and enters above Farnham. It flows eastward by Godalming, where it becomes navigable, and northward by Guildford, above which, at Shalford, it is joined by the Wey and Arundel canal. From Guildford the Wey, with the Wey navigation, runs NNE to the Thames at Weybridge below Chertsey, having previously been joined by various tributaries, and on the W by the Basingstoke canal. The Mole, which is a smaller stream than the Wey, rises from several springs on the S border of this co. It flows at first through a flat and rather uninteresting district till it approaches the great barrier of downs crossing the co. Near Dorking, which it leaves on the SW, it enters one of the defiles of these downs, and traversing a romantic valley, washes the foot of Box-hill in its progress to Leatherhead. Here it is occasionally confined in its course for about a couple of miles to subterraneous channels, whence it again issues, quitting the hills and winding through a range of commons by Stoke and Cobham, the latter of which it almost encircles, to Esher, whence it winds through an uninteresting flat to its conflux with the Thames opposite Hampton-court. The Wandle rises near Croydon, and flowing past Beddington, Carshalton, Mitcham, and Merton, runs into the Thames a little below Wandsworth or Wandlesworth, to which it gives name. At Carshalton it is much increased by numerous springs, and in its course of 10 m. and upwards it turns nearly 40 mills. A considerable branch of the Medway rises in the S part of the co., and after being joined by the Broad Medwater and other streams near Lingfield quits Surrey for Kent. The Lodden skirts the county on the W, running nearly NW by Frimley till it quits the county. The Basingstoke canal is supplied from the Lodden.

*Canals and Railways.*] The Wey navigation is partly artificial from Godalming by Guildford to the Thames, between the two latter of which there are four locks; amongst the first that were



formed in England. The Wey was made navigable from Guildford to the Thames about the end of the 17th cent., and from Godalming to Guildford in 1760. The Wey and Arundel canal enters the co. on the S from Sussex near Aldfold, and runs NNW to the Wey navigation at Shalford.—The Basingstoke canal was completed in 1796. It runs from Basingstoke, in Hampshire, to the Wey near Byfleet, by Pirbright and Goldsworthly. From Dradbrooke to the Wey, a distance of 15 m. it has a fall of 196 ft.—The Surrey canal enters from the Thames by a dock at Rotherhithe, capable of containing about 100 sail of square-rigged vessels. The main line at first runs nearly S from this dock to the west of Deptford, and thence proceeds westward across the Kent road to Camberwell. It was originally intended to continue it to the Thames at Vauxhall creek. The whole of this canal is on one level without a lock.—The Croydon canal was projected in 1800. It was carried from Croydon through the north-west corner of the county of Kent, to the Surrey canal in the parish of Deptford. This canal, however, was purchased by the Croydon railway company, to form a way for their new line to the metropolis.—The Croydon and Wandsworth railway, formed in the beginning of the present cent., along the valley of the Wandle, for the transmission of coal, lime, &c., was the first public line ever constructed: it was afterwards extended, over ground of very various level, to Mergtham and Godstone, and was intended to proceed to Reigate, but was never completed. The length of the original line is 9½ m. The London and Croydon branch of the South-eastern railway runs partly in the line of the old Croydon canal, entering Kent at Penge common. The South-eastern railway proceeds by Mersham, where it passes through a tunnel, to Redhill, a little below Reigate, where it crosses the south-eastern corner of the co. by Crowhurst into Kent. The South-western, or London and Southampton line begins at Nine Elms, near Vauxhall-bridge, Lambeth, and crosses the N part of the co. in a SW direction, by Kingston, and the Basingstoke canal, into Hampshire. The London and Greenwich railway, in which the Croydon, the Dover, and the Brighton, terminate, begins in this co. at Tooley-street, near London bridge.—The principal roads intersecting the county are those from London to Portsmouth and Brighton. The Portsmouth road proceeds from Southwark and Lambeth, through Wandsworth, Kingston, Guildford, and Godalming, into Sussex. The Brighton through Streatham, Croydon, and Reigate, also into Sussex.

*Trade, Manufactures, &c.* A considerable share of the traffic in county produce is with the metropolis. S. cannot be called a manufacturing co.; yet, from its vicinity to the metropolis, and the convenience of its streams for the erection of mills, manufactories of importance have been established in it. Paper at Godalming and Haslemere; parchment, plate-glass, vinegar, at Lambeth; artificial stone, established in 1769, at Lambeth; delf and earthenware, iron and brass works, copper works, tanneries, at Bermondsey; calico printers, at Mitcham and Merton; charcoal at Croydon; gunpowder, ropes, boats, anchors, considerable stocking weaving at Godalming, where, and at Farnham, was formerly a very extensive weaving of woollen cloth, long discontinued; glass at Southwark and Lambeth; vitriol at Kennington and Battersea; hats at Southwark; and patent shot at Lambeth.—Since the passing of the Reform act 4 members are returned for the county; 2 for the eastern division, who are polled for at Croydon, Reigate, Camberwell, and Kingston, the principal place of election being Croydon; and 2 for the western, who are polled for at Guildford, Dorking, and Chertsey, the principal place of election being at Guildford. The number of electors registered for the E division, 5,531; in 1852, 6,618; for the W division in 1837, 3,688; in 1852, 3,897. The boroughs of Southwark, Lambeth, and Guildford, also return 2 members each, and Reigate 1. S. is included in the home circuit. The Lent assizes are held at Kingston, and the summer-assizes at Guildford and Croydon, alternately. There are county-jails at Guildford, the county-town, and at Southwark.—S. forms an arch-deaconry in the dio. of Winchester. The poor-rate returns for three years to Easter, 1750, show an average expenditure of £26,598 on the poor of this county; for 1840 the expenditure was £169,952.

*History and Antiquities.* Before the Roman invasion, S. was inhabited by the *Regni*, or *Rhemi*. Under the Romans it was included in the province of *Britannia Prima*. It seems to have been at an early period included in the kingdom of Wessex. In

the later history of this co. nothing worthy of particular notice occurs, except that, during the contest between Charles I. and his parliament, S. strenuously supported the proceedings of the latter.

**SURREY**, a county of Jamaica, comprising the E portion of the island. It contains 6 parishes. Its capital is Kingston.

**SURREY**, or **SURRY**, a range of hills in New South Wales, in the co. of Cumberland, partly within the city of Sydney.—Also a range of hills towards the NW of Van Diemen's Land, about 60 m. SE of Circular Head.—Also a river of Australia Felix, in the co. of Normandy, which enters Portland Bay, in S lat. 38° 15' 43".

**SURRUKPUR**, a village of the Punjab, on the right bank of the Ravee, and 15 m. SW of Lahore. The river is here about 450 ft. wide, and is crossed by a ferry.

**SURRY**, a county of Lower Canada, in the district of Montreal, bounded on the W by the St. Lawrence, and traversed by the Richelieu. Its chief place is Assumption.

**SURRY**, a county in the SE part of the state of Virginia, U. S., comprising an area of 263 sq. m., bordered on the NE by James' river, and on the SW by Blackwater river, and drained by several branches of the latter river. The surface is level, and the soil a fine fertile loam. Pop. in 1840, 6,480; in 1850, 5,676. Its chief town bears the same name.—Also a county in the NW part of the state of North Carolina, comprising an area of 670 sq. m. It has a mountainous surface, and is drained by Yadkin river and its branches. Pop. in 1840, 15,079; in 1850, 18,443. Its capital is Rockford.—Also a township of Hancock co., in the state of Maine, 83 m. E by N of Augusta, bounded on the E by Union river and bay. Pop. in 1840, 857; in 1850, 1,189.—Also a township of Cheshire co., in the state of New Hampshire, 43 m. SW by W of Concord. It has a diversified surface, and is drained by Ashuelot river. Pop. in 1840, 481; in 1850, 550.

**SURSEE**, a bailiwick and town of Switzerland, in the cant. of Lucerne. Pop. of bail. 23,851. The town is 14 m. NW of Lucerne, on the r. bank of the Sur, a little above its confluence with the Aar. Pop. 3,612. It consists of three principal streets, of which the central and chief is bordered with well-built houses. It contains several fine fountains, a parish church, a spacious town-house, an orphan's asylum, and a Capuchin convent.

**SURTAF**, a rocky mountain ridge of Afghanistan, on the S side of the valley of Kahun, and crossed by the road from the town of that name to Pulagie. It connects the Hala with the Suliman mountains.

**SURTAINVILLE**, a village of France, in the dep. of the Manche, cant. and 4 m. S. of Pieux, on the slope of a hill, near the coast of the English channel. Pop. 1,150.

**SURUBIM**, a river of Brazil, in the prov. of Piaui, in the comarca of Marvão, and joins the Poti or Longa, on the r. bank, near the town of Campo-Maior. It gives its name to a species of fish which abounds in its waters.

**SURUBIU**, a lake of Brazilian Guiana, between the rivers Gurupatuba and Orimimina, and 18 m. from the l. bank of the Amazon, into which it discharges itself by three outlets.

**SURUHI**, a parish and town of Brazil, in the prov. of Rio-de-Janeiro, on a river of the same name, an affluent of the bay of Niterohi. Pop. 2,000. It has a good port, and carries on a considerable trade in grain, rice, and sugar.

**SURUHI-MIRIM**, a river of Brazil, in the prov. of Rio-de-Janeiro, which runs S, and throws itself into the bay of Niterohi.

**SURUL**, a mountain on the confines of Transylvania and Wallachia, 21 m. SE of Hermanstadt. It has an alt. of 2,147 ft. above the Aluta, into the l. bank of which it sends several streams.

**SURWOD**, a village of Cutch-Gundava, 50 m. W of Kahun, on the road thence to Bagli.

**SURVEYOR'S CREEK**, a river of New South Wales, in the district of New England.

**SURY-ES-BOIS**, or **EN VAUX**, a commune of France, in the dep. of the Cher, cant. of Vailly, and 3 m. NNW of Sancerre, on the Salrene. Pop. 1,025.

**SURY-LE-COMTAL**, a commune of France, in the dep. of the Loire, cant. and 5 m. NW of S. Rambert, near the r. bank of the Mare. Pop. in 1846, 2,593. It has the ruins of the ancient residence of the counts of Forez. It has an active trade in corn and lime.

**SURZUR**, a commune of France, in the dep. of Morbihan, cant. and 9 m. SE of Vannes, near a lake communicating with the Atlantic. Pop. in 1846, 2,208. It has a cloth manufactory.

**SUS**, a village of Switzerland, in the cant. of the Grisons, 33 m. SE of Coire, near the l. bank of the Inn, at the foot of Mount Fluela.

**SUSA**, a province of the Sardinian states, bounded on the NE and E by the prov. of Turin; on the S by that of Pinerolo; on the SW, W, and NW, by the chain of the Cottian Alps. It has an area of 1,395 sq. kilometres, with a pop. in 1842, of 78,036. The river Dora intersects it from its source in Monte-Ginevre to Rivoli, and the surface forms a continuous valley rarely exceeding a  $\frac{1}{2}$  m. in width. Its chief products are chestnuts, barley, oats, potatoes, and other vegetables: little wheat is grown. The prov. is rich in minerals, particularly in copper and lead. The extensive mountain-pasturages support a large number of cattle. There is little manufacturing or commercial industry. A strong, thick woollen cloth, and a very coarse species of canvas, are woven; some leather and paper also are made.—The cap., of the same name, is situated on the r. bank of the Dora-Riparia, 25 m. W of Turin, at an alt. of 503 metres above sea-level, on the site of the ancient *Segusio*. It is walled, and has several antique gates and towers. The cathedral is a very ancient edifice. Among the public buildings are the episcopal and civil palaces, and the palaces of the governor of the prov. It has several schools, hospitals, and other charitable institutions. Pop. in 1842, 3,270, in 682 families and 352 houses.

**SUSANNAH**, an island of the Bay of Bengal, in the Mergui archipelago, off the coast of Lower Siam, to the S of Dome island, and N of that of St. Matthew, in N lat.  $10^{\circ} 30'$ , and E long.  $98^{\circ}$ .

**SUSCOL**, a village of Solano co., in the state of California, U. S., to the W of a range of hills of the same name, and extending N of the city of Vallejo. It is 8 m. in length, 3 in breadth, and is washed in its entire extent by Napa bay. It has two large soda springs.

**SUSE**, a province in the SW part of the empire of Morocco, bounded on the N by the prov. of Morocco; on the E by that of Draha; on the S by the Sahara; and on the W by the Atlantic. It is covered to a great extent by the Atlas chain, but has some fine plains and fertile valleys. The Suse or Ras-el-Wad in the N, the Mesmar Messa towards the centre, and the Non or Nun in the S, are its principal streams. Its chief productions are corn, rice, millet, wine, indigo, sugar, dates, olives, figs, pomegranates, oranges, citron, and gum-arabic. Camels, horses, asses, mules, oxen, sheep, and goats, are reared in great numbers on its pastures. Its chief towns are Agadir, Tarodant, Talant, and Wadnun or Nun.

**SUSE**, or **RAS-EL-WAD**, a river of Morocco, in the prov. of Suse, which descends from the Atlas mountains; sweeps S, then WNW, and after a course of 135 m., throws itself into the Atlantic, a little to the S of Agadir. Terodant is the chief place on its banks.

**SUSE**, or **SOUSAH**, a town in the kingdom and 75 m. SSE of Tunis, partly on a hill, and partly on the gulf of Hammamet. Pop. 10,000. It has a circuit of 3 m., and is defended by a well-built wall and numerous batteries, one of which reaches to the water's edge. It contains several handsome mosques and well-kept bazaars, but otherwise contains few objects of interest. Some of the houses are adorned with columns from the adjacent ruins of Ekunda. It has manufactories of linen, and carries on an active trade in oil, wool, pottery, shoes, and stuffs. Olives are extensively cultivated in the environs.

**SUSE**, **SUSS**, or **SCHUSS**, a river of Switzerland, in the cant. of Berne, which has its source in the SW part of the Val-St. Imier; runs first NE, then S; passes Bienne; and,  $\frac{2}{3}$  of a mile below that town, throws itself into Lake Bienne. It has a course of about 30 m., and forms two cascades.

**SUSQUEHANNAH**, the largest river of the state of Pennsylvania, U. S., formed by the union of two branches. The head-branch, which is the principal feeder, rises in Otsego lake, New York; the west branch, in Huntingdon co., Pennsylvania. They unite, after respective courses of 260 and 200 m., at Northumberland, and the confluent stream then runs SE into the head of Chesapeake bay, in Maryland. It is  $1\frac{1}{2}$  m. wide at its mouth, but is navigable only 5 m. A frequent succession of rapids obstructs the upward navigation. By the Juniata and its other tributary streams from the W, the S. approaches near the waters of the Alleghany, which forms one of the two branches of the Ohio; and there is but a short land-carriage from the Tioga and its confluent waters, to Lake Seneca and the river Genesee, which fall into Lake Ontario. The water-shed between the tributaries of the St. Lawrence and the S., has but a moderate elevation, and is crossed by the Central and Erie railroad. In the plains of the townships of Tully and Preble are four small lakes, within a circle of somewhat less than 2 m. in diameter. Two of these lakes discharge themselves into the S.; one has no outlet; and the fourth discharges itself into Onondaga creek.

**SUSSAC**, a commune of France, in the dep. of the Haute-Vienne, cant. and 4 m. SSE of Chateaufort, near the l. bank of the Combade. Pop. 1,218. It has quarries of marble and lime, and several paper-mills.

**SUSSEN**, a commune of Belgium, in the prov. of Limburg and dep. of Sichen-Sussen and Bolre. Pop. 493.

**SUSSER-BRINK**, a mountain of Hanover, in the principality of Kalenberg and bail. of Wennigsen, 12 m. SW of Hanover. It forms a branch of the N side of the Deister-Gebirge, and contains a coal-mine.

**SUSSEX**, a southern maritime county of England; bounded on the N by Surrey and Kent; on the NE and E by Kent; on the SE and S by the English channel; and on the W by Hampshire. Its average length, from E to W, is 76 m.; average breadth nearly 20 m.; square area, according to parliamentary returns, 1,466 m., or 938,240 acres: according to Young, in his *Agricultural Survey*, 933,360 acres. In size it is the 14th of the English co.

*Coast-line and general features.* The destruction and removal of extensive tracts of land on the S. coast, by inroads of the sea, is frequently noticed in the ancient records of the co. The ancient site of Brighton has long since been wholly swept away; but little more than a century ago numerous houses,



fortifications, and gardens, were situate below the present cliffs. Various other instances of change in the line of this coast, will be found by reference to articles HASTINGS, RYE, WINCHELSEA, &c. Even at present the ocean is here silently, but incessantly, carrying on the work of destruction, with but few exceptions, along the whole line of coast. At no distant period, the outliers of tertiary strata, still remaining on the Sussex chalk-cliffs, must entirely disappear. The present coast-line trends from Rye Old harbour on the E. in a waving line by Fairlight-head, Hastings, and Langley-point, SW to Beachy-head, the most prominent and formidable headland on the S. coast, and indeed, the highest on the southern coast of England. Thence the coast retreats NW, by Seaford and Brighton, to Shoreham, whence it again advances SW by Worthing and Pagham-harbour, to Selsey-bill, another headland of less prominence than Beachy-head, and which is rendered peninsular at the flow of the tide by Pagham-harbour. From Selsey-bill the coast again retreats through Bracklesham-bay to the W limit of the county, where it becomes broken into the isles of Hayling and Portsea, the sea here entering by a narrow strait inland, forming Chichester harbour, in the middle of which is Thorney isle.—In the surface and scenery of S., the most remarkable feature is derived from the chalk-formations called the Downs. These open hills, which are celebrated for their velvet green verdure, rounded summits, hollow combs, and graceful though naked undulation, rise from Pevensy-marsh into the promontory of Beachy-head, and form the only exception to their general character of graceful beauty; trending thence westward as far as Brighton, whence, gradually quitting the coast, they run through the W district of the co. in a NW direction for about 53 m. to Hampshire, which they enter near Stansted. The average breadth of the range is 5 m.; height 500 ft. The maritime district between the Downs and the sea consists of a rich and extensive vale of arable land. The Weald is a woodland district running parallel with the Downs, forming an extensive valley between them and the Surrey hills, and occupying the centre of the SE part of the county, for a length of 30 to 40 m., by 5 to 10 m. in breadth. The Forest-ridge, forming the elevated district occupying the NE part of the co., is perhaps the most romantic part of S. Its surface is broken into hill and dale, and for the most part covered with birch, hazel, or beech underwood, with ferns, heath, &c. St. Leonard's forest contains 10,000 acres of this district; Ashdown, 18,000. Crowborough beacon, the highest and most central eminence in the range, is 804 ft. above sea-level. The Marsh land is in general a very unpicturesque though highly profitable district, extending eastward of Beachy-head into Kent, with the interruption of about 5 m. formed by the Hastings hills, and the high land of Fairlight-down.

*Soils and crops.* The soil of the South Downs varies according to its locality. The Down district, extending from Eastbourne to Shoreham, is about 26 m. in length, and about 7 m. in breadth, and properly speaking, constitutes the whole of the South Downs. There are about 50,000 acres of down lands, on which the soil is so thin and so near the chalk that they are unfit for the plough. The soil of the maritime district is a rich loam, either on reddish brick earth or on gravel. The upper soil varies in depth from 10 to 16 in., and is probably equal in quality to any soil in England. Between Brighton and Shoreham the general breadth of this rich vale is not 1 m.; between the Adur and the Arun it is increased to 3 m.; and thence to the

Hampshire border it widens still further from 3 to 7 m. In the SW corner the land is stiffer and more retentive, and in Selsey peninsula more argillaceous. The soil of the Weald is, in general, a very stiff loam on a brick clay bottom based on sandstones. That of the Forest-ridge is in many parts sterile in the extreme, being a sandy loam upon a sandy grit-stone, or a poor black vegetable sand on a soft clay marl. There are about 30,000 acres of marsh land in this co. which constitute excellent pasture-ground. The clay soils, though cold, produce good wheat. Beans and potatoes are grown by almost every farmer, though, to no great extent. Hops are extensively cultivated, especially in the E part of the co. The average rental is 18s. 3d. per acre.—The South Down sheep is celebrated throughout the whole country, into the remotest part of which, including Scotland and Ireland, it has now been introduced. The true South Down sheep is polled, and when well bred has a small head and clear neck, which are very essential qualities. In quality of flesh this breed is not surpassed in England; and in fleece, scarcely, if at all, even by the Hereford sheep. The S. breed of cattle is also highly celebrated. The thorough-bred S. cow has a deep red colour, fine hair, and mellow thin and soft skin, small head, and horizontal and transparent horn turned up at the tips. The horse of this co. is by no means of a first-rate breed. North Chapel and Hinford are poted for their poultry, and the Weald furnishes the greater part of what are sold as Dorking fowls. Many of the sandy wastes are occupied by rabbit-warrens, from which large supplies are sent to the London market.—The mineral productions of S. are chalk, limestone of various kinds, ironstone, sandstone, red ochre, and fuller's earth. On the S side of the Downs marl is dug in various places. Of the limestone, one species is called Petworth marble, formed almost exclusively of the shells of the whelk or snail species, such as appear to have lived in the great rivers, of which the Weald district was once the estuary. Limestone, and ironstone in contact with it, often rise to within a few feet of the surface. In the Weald, sandstone and ironstone occur everywhere, and underneath these strata of limestone.

*Rivers and canals.* The rivers of S.—having their sources within the county, and running with a pretty direct course southwards to the sea—are of no great importance. The principal are the Arun, the Rother, the Ouse, the Adur, and the Lavant. Another river called the Rother, partly bounds the co. on the E. The Arun rises in St. Leonard's forest, flows W by Horsham, and thence turning S receives the Rother near Stopham, and passing the town of Arundel, flows by a serpentine course through a rich and extensive marsh tract into the sea at Little Hampton. The tide flows up this river for 17 m., and with the aid of a few artificial cuts, it was made navigable for barges of 30 tons burden, as far up as Newbridge. With similar assistance the Rother is navigated as high as Midhurst. The Wey and Arundel canal continues the navigation of the Arun into SUSSEX: which see. Another canal, commencing below the town of Arundel, connects the Arun with the Lavant, from which the navigation is continued through the channels which separate Thorney and Hayling islands from the mainland, to the E side of Portsea island, where the artificial navigation again commences, and proceeds across that island to Portsmouth. The Arun is famous for mullets, which in the summer season come up in large shoals as far as the town of Arundel. It is celebrated also for trout and eels.—The Ouse is formed by the junction of two streams to the E of Cuckfield, whence flowing first to the E and afterwards S by the town of Lewes, it falls into the sea at Newhaven. It has been made navigable for small vessels as far up nearly as Cuckfield.—The Adur, called also the Beeding, has its source in St. Leonard's forest, and flows S by Steyning and Bramber, to Shoreham, where it takes an E direction, flowing parallel with the coast and at no great distance from it, till it falls into the sea a little to the west of Brighton. It is navigable for ships up to Shoreham, and for barges to the village of Ashurst.—The East Rother rises in the forest of Ashdown, whence flowing E, it becomes the boundary between Sussex and Kent. \*Passing the Isle of Oxney in the latter co., it suddenly turns to the S, and crossing the eastern extremity of Sussex, expands into an estuary, by which it falls into the sea, after forming the harbour of Rye. It is navigable as far

up as Robertsbridge.—The Lavant, a smaller stream than any of the preceding, rises in the chalk hills near East Dean, and flowing S by Chichester, enters the sea by a broad estuary between the village of Wittering and the SE point of Hayling island, in Southamptonshire.—The Military canal begins in its eastern extremity, and runs into Kent; see that article.—The roads from the principal towns to the metropolis, and the great cross-road near the coast which connects them together, are the principal turnpike roads in the county. The Sussex roads are very numerous; and are in general well-executed, with good materials, chiefly whinstone and the Kentish rag.—S. is now united with the metropolis by the South-eastern railway, which was opened to the public on 21st September 1841. It begins in the Croydon and London railway near Croydon, as the Dover line begins in it at Redhill in Surrey: which see. It enters this co. near East Grinstead, and runs southward, to the E of Cuckfield and Hurstpierpoint, and by Clayton and Prigton, to Brighton. The line passes through tunnels at Merstham, Balcombe, Hayward-Heath, Clayton, and Pateham, which are all lighted with gas. Across the valley of the Ouse it runs along a beautiful viaduct of 37 brick arches, 30 ft. each in span.

*Trade and manufactures.* The trade of S. is principally in its farm and mineral produce. The chief manufactures are those of iron, wool, charcoal, gunpowder, potash, paper, salt, and pottery. The iron manufacture was at one time extensively carried on; but in consequence of the establishment of iron works in the coal-districts of the middle and northern counties, and the decay of fuel from the diminution of the woods, the works here were abandoned. Charcoal is still made in considerable quantities, chiefly for the manufacture of gunpowder. The gunpowder made at Battle is said to be the best in Europe. Potash is made at Petworth for the soap-boilers there; salt, at the works at Appledram and Itchenor. Pottery of a very superior quality is made at Chailey. Bricks are made in many parts of the county and also tiles. In some of the ports ship and boat building is carried on upon a small scale, and timber, cordwood, charcoal, and oak-bark are exported. On the coast are caught herrings, mackerel, and flat fish, which are sent to the London market. Artificial lakes, used as fishponds, are numerous in the Weald; and carp, tench, perch, pike, and eels, are bred in them for the London market.

*Divisions, &c.* This co. is divided for parliamentary purposes into E. and W. Sussex. Each of these is subdivided into *rapes*, a division peculiar to this county, but similar to the *lathes* in Kent. East Sussex comprehends the rapes of Hastings, Pevensey, and Lewes; West Sussex those of Bramber, Arundel, and Chichester. The hundreds are subdivided into 313 parishes, containing 1 city and co. in itself, Chichester; 9 parl. boroughs, Chichester, Mjdhurst, Arundel, Horsham, and New Shoreham, in W. Sussex; and Brighton, Lewes, Hastings, and Rye, in E. Sussex; 4 cinque ports, Hastings, Rye, Winchelsea, and Seaford; and 19 market-towns, viz., the 11 towns already named, together with Worthing, Battle, Bognor, East Grinstead, Steyning, Cuckfold, Hailsham, and Petworth.—The pop. of this county in 1801, was 159,311; in 1831, 272,300; in 1841, 299,770; in 1851, 336,844. In 1831, 22,450 families were chiefly employed in agriculture, and 17,489 in trade, manufactures, and handicraft. In 1851, about 12 per cent. of the pop. was engaged in agriculture, and 10 per cent. in trade and manufactures. Since the passing of the reform act, 4 members are returned for the co.; 2 for the eastern division, who are polled for at Lewes, East Grinstead, Battle, and Mayfield, the principal place of election being at Lewes; and 2 for the western, who are polled for at Chichester, Steyning, Petworth, Horsham, and Arundel; the principal place of election being Chichester. The number of electors registered for the co., in 1837, was 7,951; of whom 4,799 were for the eastern division, and 3,152 for the western. In 1852, the number of registered

electors for the E division was 5,298; for the W, 3,257. The boroughs of Chichester, New Shoreham, Brighton, Lewes, and Hastings, also return 2 members each; and Arundel, Horsham, and Rye one each: in all, with those for the shire, 18 members. Sussex is now included in the home-circuit. The Lent assizes are held at Horsham; the summer and winter ones at Lewes. The quarter sessions are held at Chichester, Lewes, Horsham, and Petworth. S. is co-extensive with the dio. of Chichester, in the prov. of Canterbury, and is divided into the two archdeaconries of Lewes and Chichester.—The poor rate returns for 3 years to Easter 1750, show an average expenditure of £24,343 on the poor of this co.; in 1845, the expenditure was £179,538. The annual value of real property paying property tax in 1806 was £1,436,513; in 1850, £1,676,999.

*History.* S., which formed part of the territory of the *Regni*, was by the Romans included in the division *Britannia Prima*, and here, after the departure of that people, Ella the Saxon landed with his three sons and a considerable number of followers in the year 477, and by the capture of Anderida, the capital of the *Regni*, laid the foundation of the kingdom of the South Saxons, called in Saxon *Suth Seaxe*, contracted into the modern name *Sussex*. About 728, this kingdom was united by conquest to the kingdom of Wessex. On the 29th of September 1066, William, duke of Normandy, in his way to invade England, arrived in Pevensey-bay with a fleet of 900 sail. Landing his troops, William came to an engagement with his opponents on the 14th of October, at a place called Epton, but ever since, *Battle*. A decisive battle was fought at Lewes in this co. on the 14th of May 1264, between the forces of Henry III. and those of his barons, in which the king and his son, Prince Edward, were made prisoners. In the great civil war, the friends of Charles I. in this co. exerted themselves with zeal in his behalf, but with no better success than elsewhere. S. gave the title of duke to Prince Augustus Frederick, sixth son of George III.

**SUSSEX**, a county in the N part of the state of New Jersey, U. S., comprising an area of 568 sq. m. It has a generally mountainous surface, and is drained by Wallkill, Pequannock, Pequest, and Paulenskill creeks. Pop. in 1840, 21,770; in 1850, 22,989. Its capital is Newton.—Also a county in the S part of the state of Delaware, comprising an area of 994 sq. m., bounded on the E by Delaware bay and the Atlantic, and drained by Nanticoke river and its branches, and by Marshy Hope river, affluents of Chesapeake bay, and by Indian river, and Mispillion, Jones, and other small creeks which flow into Delaware bay. Pop. in 1840, 25,093; in 1850, 25,935. Its capital is Georgetown.—Also a county in the SE part of the state of Virginia, comprising an area of 458 sq. m., generally level and fertile, and drained by Nottoway river and its branches, and intersected by the Petersburg and Weldon, and Petersburg and Norfolk railroads. Its capital bears the same name.

**SUSSEX**, a county of Western Australia, bounded on the N by Geographe bay, and a corner of the co. of Wellington; on the E by the counties of Nelson and Lanark; and on the S and W by the ocean. Its chief headlands are Cape Naturaliste to the W of Geographe bay; Capes Clairault, Mentille, Freycinet and Hamelin on the W coast; and Capes Leeuwin and Beaufort on the S. It presents towards the W an elevated tract of granite and limestone, with a finely undulating surface, well wooded, abounding with springs, and capable of good cultivation. Towards the NE is Whitcher range, and near the W coast is Mount Duckworth. The principal rivers are the Blackwood and Scott, flowing into Augusta and Hardy inlet on the S, Turner and Margaret rivers on the W, and Lennox and Vasse rivers on the N. The chief towns are Dunsboro, Busseton, Wonnemup, and Augusta.

**SUSSEX-HAVEN**, a harbour of New South Wales, in the co. of St. Vincent, at St. George's basin, 120 m. from Sydney.



**SUSSY**, a village of France, in the dep. of the Seine-et-Oise, cant. and  $1\frac{1}{2}$  m. N of Boissy-St.-Leger, and 11 m. SE of Paris, on a hill, near the l. bank of the Morbras, an affluent of the Marne. Pop. 1,200. It has a fine castle, and in the vicinity are numerous country seats.

**SUSTEAD**, or **SISTEAD**, a parish in Norfolk, 4 m. SW of Cromer. Area 522 acres. Pop. in 1851, 133.

**SUSTEN**, a col or mountain pass in Switzerland, in the mountains which separate the cantons of Berne and Uri. It has an alt. of 5,940 Parisian ft. above sea-level, and is traversed by the road from Imhof to Wasen.

**SUSTINENTE**, a town of Austria, in Lombardy, in the prov. and 12 m. SE of Mantua, and district of Ostiglia, on the l. bank of the Po. Pop. 1,900.

**SUSU**, a small town of Sumatra, on the W coast, in the state and 150 m. SE of Achem, on a bay of which Cape Felix forms the W extremity. The bay contains numerous shallows, but good anchorage is obtained at the distance of 3 m. from the town. The trade consists chiefly in pepper and gold dust.

**SUSZ**. See **ROSENBERG**.

**SUTCOMBE**, a parish in Devon, 5 m. NW of Holsworthy, on the river Waldon. Area 3,593 acres. Pop. in 1831, 491; in 1851, 488.

**SUTENDAEL**, a department and commune of Belgium, in the prov. of Limburg and arrond. of Tongres, watered by the Sutendaelbeckske. Pop. 854.

**SUTERA**, a town of Sicily, in the prov. and district, and 25 m. WNW of Caltanissetta, and cant. of Mussomeli, on a mountain, near the l. bank of an affluent of the Platani. Pop. 4,000. It has little trade, and is rarely visited by travellers.

**SUTHERLAND**, a headland of New South Wales, in the co. of Cumberland, on Botany bay. It was the earliest cleared tract of ground in Australia.—Also a parish of Australia, in the co. of Buckingham, bounded on the N by the Derwent.

**SUTHERLANDS**, a village of Upper Canada, in the township of Moore, on the St. Clair, opposite an American town of that name. Pop. 100.

**SUTHERLANDSHIRE**, a Highland county, in the extreme NE of the continent of Scotland; bounded on the N by the North sea; on the E by Caithness-shire; on the SE by the Moray frith; on the SSW by the cos. of Ross and Cromarty; and on the W by the Atlantic ocean. It lies between the parallels of  $57^{\circ} 53'$ , and  $58^{\circ} 33' N$ , and between  $3^{\circ} 40'$  and  $5^{\circ} 13' W$  long. Its sides, measured in straight lines, give a circumf. of 215 m. Its area is 2,925 sq. m., or 1,872,000 English acres. This area—which is that assigned by Captain Henderson's *General View of the Agriculture of Sutherland*, published in 1812—is distributed by the same authority into 18,125 English acres of arable land,—43,750 of meadow and green pasture, with some shrubbery,—1,170 of plantations,—1,571,400 of heathy and rocky moors and mountains,—176,100 of peat-moss,—31,360 of sea-lochs—and 30,080 of fresh-water lakes. Though the relative proportions of arable land, green pasture, and planted woodland, have undergone some change, these measurements may probably be regarded as indicating, with proximate correctness, the real condition of the county. A recent authority makes the area only 1,754 sq. m., or 1,122,560 acres; and distributes it into about 150,000 acres cultivated, 600,000 uncultivated, and 372,560 unprofitable. Excepting a very narrow and interrupted belt of low ground along the coasts, and some ribbony stripes of alluvium along the banks of the principal streams, the whole co. is boldly upland, and lies upon a basis of probably 1,500 ft. of mean alt. above sea-level. The mountains along the E are a tower-

ing and well-defined chain; and those along the SE rise, in every place, within a distance of not more than 2 m. from the sea; and, in both cases, they stretch away, in innumerable ranges and masses, quite to the German ocean. A sort of central chain commences at Ben-Griam-More and Ben-Griam-Beg, about 14 m. from the NE extremity, and extends SW to Ben-Suilven, very nearly at the SW extremity; this chain divides the co. into almost equal parts, and lifts up numerous summits of from 2,500 to nearly 3,300 ft. in alt., and of remarkable and singular varied contour. The western district, comprising Assynt, Edderachyllis, and part of Durness, is one of the most remarkable in the kingdom for constant inequality and ruggedness of upland surface, and for a profuse and rapid interlacing of rocky heights and fresh-water lakes. The northern district, comprehending part of Durness, all Tongue and Farr, and the Sutherland part of Reay, possesses to some extent a similar character to the former; but goes off in the interior into broad, smooth, and moorish upland expanses, and is relieved along the coast by an open tract of arable land in Durness, by the exquisitely scenic semicircular vale of Tongue, by the long and beautiful valley of Strathnaver, and by the green and bounteous though tame valley of Strath-Halladale. The south-eastern district, while exhibiting more or less of the various features which we have ascribed aggregately to the county, possesses a large extent of rich pasture-ground, and, in a general view, is cut into five somewhat parallel elongated sections of high hills by the long and pleasant valleys or glens of Helmsdale, Eddra, Shin, and Oikel. The south-east sea-board, over a breadth of from one-fourth of a mile or less to 2 m., is an opulent tract of low ground, luxuriant in produce, beautiful in cultivation, and exultant in embellishment. The chief mountains of upwards of 2,000 ft. in alt., are Ben-More-Assynt, 3,431 ft.; Ben-Klibreck, 3,164; Ben-hope, 3,061; Fionaven, 3,015; Ben-Hie, 2,858; Ben-Spiunnue, 2,566; Ben-Laoghal, 2,508; and Ben-Armin, 2,306.

*Coasts and rivers.* The principal bays and sea-lochs on the W coast, enumerating from S to N are Loch-Inver, Loch Row, Clashnessie-bay, Loch-Assynt with its offshoots, Loch-Nedd, Loch-Ardvare, Kyle-Scow, Loch-in-Oban, and Edderachyllis-bay, Scourie-bay, Loch-Laxford, Loch-Dougel, Loch-Inchard, and Sandwood-bay. The principal on the N coast, reckoning eastward, are the Kyle of Durness or Grady, Loch-Eriboll, the Kyle of Tongue, the bay of Torrisdale, Farr-bay, Armadale-bay, the bay of Strathy, and Port-Skerry. The only noticeable indentations on the SE coast are a small creek at Helmsdale, and the large inlets of Loch-Fleet, and the Dornach frith. The coast along both the W and the N presents headlands and numerous cliffs of the boldest character, often picturesquely grand, and sometimes highly impressive and even terrific. Ru-Store and the Point of Store, in near vicinity to each other, are the chief headlands on the W; Cape-Wrath forms the NW point of the co., and, at the same time, of the continent of Scotland; and Far-Out-head, Whiten-head, and Strathy-head, are the chief promontories on the N. The SE coast, except at the boundary with Caithness, where the stupendous Ord falls precipitously down from mountain alt. to the depths of the sea, is all flat, with a prevailing sandy shore.—The streams of S. are very numerous; but as they are all indigenous, and, excepting those on the S boundary, receive no other affluents than such as rise and flow like themselves in the interior, they possess, in dry weather, but a small body of water. Only the Oikel and the Fleet,

and these but for short distances, are navigable; but all the larger ones are valuable for their salmon-fishings. Those which flow westward to the Atlantic have short courses through wildly broken districts, and along shelving and disrupted beds, and are remarkable chiefly for their turbulence, impetuosity, and display of cataract and cascade. The principal are the Kirkaig on the boundary; the Inver in Assynt; and the Laxford and Inchard in Edderachylis. The streams which run northward to the N. sea are more various in character; and in the instances which we shall name, they perform runs of from 12 to 30 m.—the Dionard or Grady, and the More or Hope in Edderachylis and Durness,—the Borgia or Torridale, between Tongue and Farr,—the Naver and the Strathy in Farr,—and the Halladale in Reay. The streams in the SE, flowing to the Moray frith, drain very nearly one-half of the co.; and, in several instances, are comparatively large and long, and not a little beautiful. The chief are the Helmsdale, with its affluent the Ellie; Brora, with its grand tributary formed of the united streams of Skinsdale and Strathbeg; the Fleet, opening into the cognominal sea-loch; and the Oikel, swelled by the rival river Shin, and by the large affluent, the Cassley.—The lakes of S. are very numerous; several are large; many are romantic, picturesque, beautiful, or otherwise scenic; most are well-stored with trout, and a few are curious either from position or from traditional association. Those of the first class as to size are Lochs Shin, Hope, Laoghal, Assynt, More, and Naver;—those of second class size, or of length from 2 to 4 m., are Lochs Vattie, Faun, Cama, Merland, Stack, Maddie, Ullaball, Na-Cayn, Baden, Furan, and Brora. A chain of these lakes, consisting of Shin, Merland, More, and Stack, together with a smaller lake called Giam, almost continuous with Shin, extends NW from a point within 10 m. of the navigation of the Dornoch frith, to a point within 3 m. of the head of Loch-Laxford; and as it leaves intervals of land, none of which measures more than 2 m., and at the same time sends off a large connecting stream with the navigation of the Dornoch frith, it forms a deep water-line between the eastern and the western seas quite similar in character to that which occupies the Glenmore-nan-Albin, and forms the natural and chief part of the Caledonian canal. Assynt alone contains about 200 lakes of noticeable size, besides numerous ponds and tarns.

*Climate.* Though S. is so wildly mountainous, and lies three degrees farther N than East Lothian, it almost bears comparison, in some properties of its climate, with that county. The spring may be a fortnight later in commencing, and the autumn may terminate a fortnight earlier; but the summer is quite as warm, if not warmer, and the winter is not colder. The SE coast, not only along the sea, but up the Dornoch frith and the lower Oikel, is so well-sheltered by the frontier Highland hills from N and W storms, and so amply protected by the uplands from the moistures of the North sea and the Atlantic, that the inhabitants complain, during the summer-months, of having too little rather than too much rain. The interior of the co., and the W and N coasts, are exposed to frequent rains and storms from the oceans, and have a raw coldness proportionate to their humidity. The prevailing winds blow from the NW and W, and bring rain to the districts which they first sweep, but dry weather to the great seat of the population, the SE sea-board. Winds from the Moray frith, as they blow in the opposite direction, make a reverse distribution of humidity and drought.

*Geology and soil.* Granite is a comparatively scarce rock in S.; and occurs rather in veins and veins than in independent masses. Syenite, though more frequent and less subordinate, is not plentiful. Hornblende rock and hornblende schist occur in the W. Gneiss is the prevailing rock throughout the uplands; and, in general, forms the great chains of round-backed and broad-based mountains, yet shoots out on the NW coast into bold and precipitous headlands. Micaceous schist is extensively developed in Tongue and Durness. Primary granular limestone abounds in Assynt and Durness. Quartz rock forms detached mountains in the W. Primary or old red sandstone extends in a rugged band along the W coast to near Cape Wrath, forming stupendous mural-faced heights, or hugely-volumed broken

mountains; and, after being cut off for a brief space by gneiss, it immediately reappears on the N coast, shoots ruggedly up at several points along the broken line of that coast, and after becoming united at Port-Skerry to a coarse conglomerate, passes on the confines of Caithness into continuous fields of stratified sandstone. The primary, or old red sandstone, also constitutes some of the loftiest mountains in the interior, and imparts to them a sharpness, ruggedness, and boldness of contour, which contrast picturesquely with the prevailing gneiss heights in their vicinity. A series of oolitic and lias deposits commence immediately S of the Ord of Caithness, and extend along the SE sea-board; and a great mass of them have been so upraised by immediately subjacent granite, while neighbouring masses lie upon brecciated old red sandstone, as to indicate a priority in the date of their own formation to that of the upheaving of the granite. These deposits occupy a tract of about 20 m. in length, and 3 m. in extreme breadth; and much geological interest attaches to this tract, especially to that part of it which lies in the S, and has obtained the name of the Brora coal-field. The soils of S. are less various than those of most territories of its size in Scotland. Loam, as a primitive earth, or in any other sense than as a vegetable mould, occurs only on the farms of Dunrobin, Skeibo, and Skibo. A deep bluish clay carpets part of the vale of Loth; clay of various complexions and depths occurs in small patches in several low lying farms. A purely alluvial or haugh soil carpets some low grounds upon the margin of streams; and, in general, is light and sandy. A reddish gravel, a light hazely vegetable mould, a shallow gritty sand, an ochre-coloured unproductive clay, a diluvium of gneiss mixed with peat, and a moorish or sandy peat earth, all differing less from one another than these designations might seem to imply, and reducible in classification to sandy and light hazel loamy soils, variously cover the low grounds of the interior straths and glens. Sand, with or without a mixture of small pebbles, and worked by culture and manuring into a dark-coloured vegetable mould, is the prevailing soil on the thickly-peopled SE sea-board. Moss or peat, from 18 inches to 10 feet deep, all covered with heath, and lying at too great a height upon the levels and hollows of the mountains to admit of much or any georgical improvement, covers no less than 580 sq. m., or 371,200 acres. A very large proportion of the vast mountain-district may be regarded as an irretrievable Highland wilderness. The greater part of the W is so rugged, rocky, and stern, that, except in the wild ravines and glens, very little vegetation of any sort can be discovered; and, in particular, 300 sq. m. or upwards, in the SW, are a tract of all but utterly naked mountains, so torn in themselves, and so intersected by rocky gorges and hollows, that they look as if they had been shattered by some great convulsion of nature, and consigned to terrific and perpetual sterility. The northern mountains, though less naked, are often bare near the summit, and exhibit elsewhere a studding of crags among their heath. The 18,125 English acres, or 14,500 Scottish acres, which Captain Henderson estimated as arable in 1812, are distributed by him into 190 Scottish acres of clay, 1,120 of sandy soil, 100 of peat-moss, and 13,090 of a mixture of sand, gravel, and black earth, which may be deemed a light hazel loam. The average rental, on a gross calculation, is only 7d. per acre!

*Social state.* The county's total want of roads, the excessive ruggedness of its surface, its frequent intersection by dangerous friths and by rapid flood-bearing rivers, its nearly total encompassment by strong natural boundaries, and its position in the far north, away from every point of landward access, rendered it greatly more secluded than any other Highland co., and at once repelled the approach of strangers, and greatly limited the internal intercourse of its own people. The feudal power which elsewhere lingered long in the Highlands, and was with difficulty subdued, had necessarily superior energy and wider scope in S., and continued to be unbroken long after some other Highland districts were totally revolutionized. The abolition of hereditary jurisdictions, the diffusion of the English language, the introduction of manufactures, the encouragement of fisheries, the dissemination of enlightened views on sheep and field husbandry, the drafting of population as emigrants to foreign countries, the opening up of territory by roads, the introduction of carts and improved implements of culture, and the diffusion of general knowledge and sound principles of social order, which had effected complete ameliorations in some parts of the other Highland territories; and were in the course of effecting them in the rest, continued, for some years after the commencement of the present century, to be quite or nearly as far from affecting S. as in a comparatively remote age. When the earls of Sutherland no longer required to levy troops for prosecuting feudal con-



tests, they raised for the service of Government one of those corps which have been aptly designated family regiments; and being far from the seat of royal or ministerial influence, and all but totally inaccessible by its instruments, they continued, from the very necessity of their position, to be the feudal, or at least the patriarchal chiefs of their people. A superabundant population continued, in consequence, to be maintained and fostered; the cessation of feuds, and the reign of peace and social security, greatly quickened the ratio at which the native pop. increased; and the enlargement of farms, and conversion of arable grounds into sheep walk, in the Highland counties on the south, drove hither as refugees not a small extraneous pop., who were averse to emigrate, and possessed in the aggregate much less than the mean proportion of industrious and enterprising habits which characterized their countrymen. The co. could not fail, from these causes alone, to be very rapidly and quite destructively overpeopled; and, in addition, it became the retreat of numerous Highlanders from the south, who were expatriated for idleness or misdemeanors, and of numerous tenants in Ross-shire and other adjoining counties, who removed in order to escape the payment of due or arrear rent. Exactly those evils which had for centuries half-barbarized the Highlands, thus became rampant and violent in S. at the very time when they were elsewhere becoming tamed or subdued. A hardy but indolent race swarmed up the straths and over the mountain sides; they lacerated and scourged almost every spot of earth which could be made to yield a miserable crop of oats for the support of life, or a stinted crop of bear for the distillation of whisky; they lounged lazily on the heath or around their stills, leaving to their wives and daughters most of the heavy work of both house and field; and, except in building a hut, in breaking ground for the reception of seed, in cutting turf for fuel, and in doubtfully pursuing the moorland game, they were unserviceable to their families, and mere incumbrances to themselves and their country. Misery, in its most squalid and haggard aspect, could not fail to make the speedy and thorough acquaintance of such a people. The noble family of Sutherland and Stafford—who may be said to own the co., and at least possess by far the larger and more valuable part of its lands—afforded munificent relief to starving thousands during various years of famine; but they felt that, till a radical and sweeping change should be effected in the ruinous social system on their lands, they were only soothing misery with stimulants which would eventually increase it, and they boldly conceived, and energetically carried into execution, the plan which we have noticed in our article on the Highlands. They drove to foreign countries, and to the Lowlands, probably no larger a proportion of the pop. than most other Highland improvers, and certainly a much smaller proportion than some; and they offered every facility and encouragement to the crowds who were expelled from the interior straths and the mountain sides, to settle comfortably on the coasts, and, at the same time, expended princely sums on the construction of roads, the building of neat houses, the georgical improvement of the warm and low lands upon the sea-shores, and various other means of ameliorating the condition of both the country and the people; but the suddenness of the change, the disregard of private feeling with which it was accomplished, and the all but entire depopulation of many a fine glen which figured in the fancy of many an ardent constitution in all the brilliant tints imparted by love of country, were circumstances which might have profita-

bly been softened. In 1829, the Duke of Sutherland, then Marquis of Stafford, acquired by purchase the large estates of Lord Reay; and he promptly reacted in the west and north-west the same great scene which had figured all over the Sutherland estates. The improved aspect of the co., however, extends as yet to but a small distance from the coasts. The upland country, and its enclosed straths and glens, are now disposed in large pastoral farms, some of which let for from £2,000 and £3,000 of rent each, and are held by emigrants from the south of Scotland. Cheviot sheep are the staple produce, as to both fleece and carcass; and are variously estimated in number at 170,000 and 200,000.

*Manufactures, &c.* The cotton manufacture was at one time introduced to S.; but it failed. The importing of dressed flax from the Baltic and the spinning of it into yarn, produced for a series of years about £3,000 a-year; but the trade was destroyed by Bonaparte's continental system. The manufacture of woollen stuffs was conducted to a sufficient extent for home consumpt, and the partial supply of Caithness. Kelp was manufactured in the Reay country to the value of about £3,000 a-year. All manufacture, except in a very restricted sense, may be regarded as now extinct. The commerce of the co. consists principally in the exchange of sheep, wool, black cattle, and fish, for woven fabrics and colonial produce. The salmon-fisheries at the mouths of most of the rivers are of considerable value, and, in some instances, are particularly noted. The lobster-fisheries of the west have had some repute; the cod and ling-fisheries of the north are of growing importance; and the herrings-fisheries of Helmsdale are extensive and prosperous. The only town or royal borough is Dornoch, the capital of the co. The chief villages are Bonar-Bridge, Colspie, Brora, Port-Gower, and Helmsdale, all on the SE coast. The smaller villages are Inver and Scourie on the W, and Tongue, Torrisdale, Strathy, and Port-Skerry on the N.—S., though the last district of the continent of Scotland which was provided with roads, enjoys now the singular privilege of having excellent highways without so much as one toll. In 1834, there were 13 parochial schools, conducted by 15 teachers, and attended by a maximum of 1,067 scholars, and a minimum of 430; and 43 non-parochial schools, conducted by 45 teachers, and attended by a maximum of 2,038 scholars, and a minimum of 701.—S., till some time after the abolition of hereditary jurisdictions, formed part of the sheriffdom of Caithness.—The county sends one member to parliament. Constituency, in 1838, 134; in 1851, 207. The valued rent, in 1674, was £26,093 Scottish; and the real property as assessed, in 1815, was £33,878; in 1852, £36,113. Pop. in 1811, 23,629; in 1821, 23,840; in 1831, 25,518; 1841, 24,666; in 1851, 25,793.

*History.]* The earldom of Sutherland, a title to which that of duke of Sutherland in the peerage of the United Kingdom was recently added, is asserted to be the most ancient existing peerage in Britain, and at least has for ages been the premier earldom of Scotland. William, the 2d earl, was with the Scottish armies at Bannockburn and Brigland, and wore his title during the long period of 77 years. John, the 16th earl, figured conspicuously both as a statesman and as a soldier. Elizabeth, the infant daughter and only child of William, the 18th earl, who died in 1766, succeeded in that year to the earldom, yet a sharp contest to her right was conducted, on the ground that the title could not legally descend to a female heir, and terminated in her favour by an adjudication of the House of Lords in 1771. The countess, the nineteenth person in the line of succession, married, in 1785, George Granville Leveson Gower, Viscount Trentham, eldest son of Earl Gower, afterwards Marquis of Stafford, by his second wife, Lady Louisa Egerton, daughter of the 1st Duke of Bridgewater. His lordship succeeded to his father's titles, became the second marquis of Stafford; and, in 1853, he was raised to the dignity of duke of Sutherland. The duchess of Sutherland, countess in her own right, held the earldom during the long

period of 72 years and 7 months, and died in January 1839; when she was succeeded by her eldest son, George Granville, the present Duke.

**SUTLA.** See **SOTLA.**

**SUTLEDGE**, **SUTLEJ**, or **SUTLUT**, a river of India, one of the five great rivers of the Punjab, which rises in the valley between the Himalaya chain and the Cailas range, to the W of the Langka lake in Tibet, and to the E of Lake Rawanrud, through which it runs, and from the NW extremity of which it flows under the name of the Satadra, in a NW direction about 200 m.; after which it bends SSW, bursts through the Himalaya range; and skirting the Punjab on the E, joins the Beas, and forms with that stream the Garra, which in 29° 20' N lat., joins the Chenab or *Acesines* of the Greeks, which is lost in the Indus at Mittunkote. At Shipka, in N lat. 31° 49', E long. 78° 44', it first receives the name of Sutledge. It has been calculated that the current of the S. averages 4½ m. per hour in the hills, and 2 m. in the plains, during the cold weather; but that when the snows begin to melt in the mountains, the rate increases, until in the height of the rains, about July, the average is double or more than double the above. The rises and falls of the river, however, are very arbitrary. It will often rise 6 ft. in a single night. The passage across the S. between Ludiana and Ferozepur is usually made in a ½ hour, but six hours are sometimes spent in effecting it backwards and forwards, owing to the strength of the stream; and the voyage from Rupur to Ferozepur, usually occupying three to six days, has been effected in 20 hours. In the plains, the S. runs through a line of country averaging 6 m. in breadth, and from 20 to 100 ft. lower than the general surrounding level. This tract on the S., as almost on all Indian rivers, is called the *khadir*, as the high adjoining lands are called the *bangur*. Through any portion of this bed the river is liable to force a new channel, and every year it does more or less change its course. The *khadir* is divided into two or more steps, formed by new deposits; and while the progress of destruction along the high banks of the river is very perceptible, the new formations can often be noted from day to day. In December there are several tolerable fords between Rupur and Ferozepur; but all are more or less dangerous for the passage of troops. There are from 20 to 30 recognised *ghats* between those places, and among them about 200 flat-bottomed boats could be mustered. These boats are perfectly flat, with a high projecting peak, and have sides not above a foot high. Not a nail is used in their construction; but they are admirably adapted for passage-boats, and although liable to be swamped, cannot by any possibility be upset. Their burthen averages from 150 to 300 maunds, 28 of which go to the ton. The S. between Rupur and Ferozepur, has a fall of 2 ft. per mile, being double that of the Ganges; the stream is proportionably rapid, and in the rains cannot be less than 5 m. an hour at Ludiana. In the hills it runs at from 4 to 10 m. in the hour, according to the season and locality. The average breadth of the stream between Rupur and Ferozepur is in the rains 1 m., in the cold weather 250 yds.—The S. has been identified with the *Hesdrus*, *Zaradras*, or *Hypbasis* of the ancients.

**SUTORINA**, a valley of Turkish Montenegro, that takes its name from a mountain-stream which pervades it. It is a small territory wedged in between the rocky coast of Dalmatia on the one side, and Austrian Albania on the other. Fort Spaniel, behind Castelnuovo, a fortified town, commands the approaches to that part of the S. which is in the inner part of the bay. The Aus-

trians have also recently formed a road leading from Castelnuovo towards Ragusa, across the S., so that they exercise a kind of supremacy over it, although it was ceded to the Porte in 1718.

**SUTRI**, a town of the Papal states, in the deleg. and 15 m. SSE of Viterbo, on the Pozzolo. Pop. 1,500. It has a cathedral, and several other churches and convents.

**SUTRIEU**, a village of France, in the dep. of the Ain, cant. and 4 m. NNE of Champagne, in the midst of mountains. Pop. 200.

**SUTTA-WALLA**, a village of Afghanistan, in the Daman, on the Indus.

**SUTTEE**, a central county of the state of California, U. S., between the forks of the Sacramento and Feather rivers, comprising a considerably diversified surface of 760 sq. m. In the N part are several high hills called Buttes. Pop. in 1850, 1,207. Its cap. is Oro.

**SUTTERBY**, a parish in Lincoln, 4½ m. SW by W of Alford. Area 471 acres. Pop. in 1851, 53.

**SUTTERSVILLE**, a village of Sacramento co., in the state of California, U. S., on the l. bank of the Sacramento, and 3 m. S of the city of that name.

**SUTTERTON**, a parish in Lincolnshire, 6 m. SSW of Boston. Area 6,550 acres. Pop. 1,445.

**SUTTON**, a parish of New South Wales, in the co. of Gloucester, bounded on the E by Port Stephens.

**SUTTON**, a village of Lower Canada, in the district of Trois Rivières and co. of Bedford. Pop. 1,200.—Also a township of Merrimac co., in the state of New Hampshire, U. S., 26 m. WNW of Concord, bordered on the E by Kearsarge mountain, and drained by branches of Warner river. It possesses considerable fertility. Pop. in 1840, 1,362; in 1850, 1,387.—Also a township of Caledonia co., in the state of Vermont, 39 m. NE by N of Montpelier, watered by branches of Pasumpsic river. It has a pond in the NW corner covering 200 acres, and is generally low and wet. Pop. in 1840, 1,068; in 1850, 1,001.—Also a township of Worcester co., in the state of Massachusetts, 39 m. WSW of Boston, drained by Blackstone river, and bordered on the N by the Providence and Worcester railroad. Pop. in 1840, 2,370; in 1850, 2,595.—Also a township of Meigs co., in the state of Ohio. Pop. 1,099.

**SUTTON**, a parish in Bedford, 3 m. NE of Biggleswade. Area 2,330 acres. Pop. in 1831, 386; in 1851, 449.—Also a parish in Cambridgeshire, 6 m. W by S of Ely. Area 6,970 acres. Pop. in 1831, 1,362; in 1851, 1,814.—Also a township in the p. of Runcorn, co. palatine of Chester, 2 m. NE of Frodsham. Area 1,181 acres. Pop. in 1831, 237; in 1851, 361.—Also a township in the p. of Prestbury, co. palatine of Chester, 2 m. SE of Macclesfield. Area 4,460 acres. Pop. in 1831, 5,856; in 1851, 7,525.—Also a parish in Essex, 1½ m. SE of Rochford. Area 721 acres. Pop. in 1831, 96; in 1851, 149.—Also a township in the p. of Prescott, co. palatine of Lancaster, 7 m. NW by W of Warrington, in the line of the Liverpool and Manchester railway. Area 3,656 acres. Pop. in 1831, 3,173; in 1851, 52,864. The inhabitants are principally employed in the manufacture of flint and crown glass, earthenware, and watch movements. The township abounds in coal, ironstone, and potters' clay.—Also a parish in Norfolk, 14 m. NE of Norwich. Area 1,383 acres. Pop. in 1831, 313; in 1851, 355.—Also a chapelry in the p. of Castor, Northamptonshire, 6½ m. W of Peterborough, on the E bank of the Nene. Pop. in 1831, 118; in 1851, 129.—Also a parish in Salop, 12 m. SE of Shrewsbury, on a branch of the Severn. Area 730 acres. Pop. in 1831, 81; in 1851, 35.—Also a par-



ish in Suffolk, 3 m. SE by E of Woodbridge, bounded on the W by the river Deben. Area 6,401 acres. Pop. in 1831, 680; in 1851, 732.—Also a parish in Surrey, 4 m. W by S of Croydon. Area 1,603 acres. Pop. in 1831, 1,121; in 1851, 1,387.—Also a parish in Sussex, 4 m. S of Petworth. Area 2,061 acres. Pop. in 1831, 379; in 1851, 389.

**SUTTON (EAST)**, a parish in Kent, 7 m. SE of Maidstone. Area 1,590 acres. Pop. in 1851, 383.

**SUTTON (GREAT)**, a township in the p. of Eastham, co.-palatine of Chester, 6 m. NNW of Chester. Area 1,142 acres. Pop. in 1851, 203.

**SUTTON (KING'S)**, a parish in Northampton, 6 m. W by S of Brackley, on the river Cherwell, and intersected by the Oxford canal. The parish includes the hamlets of Astrop, Purton, Walton, and part of Charleton. Area 3,850 acres. Pop. in 1851, 1,335.

**SUTTON (LITTLE)**, a township in the p. of Eastham, co.-palatine of Chester, 7 m. NNW of Chester. Area 1,120 acres. Pop. in 1851, 432.

**SUTTON (LONG)**, a parish and market-town in Lincolnshire, 20 m. ENE of Market-Deeping, including the chapelries of Sutton-St.-Nicholas, Sutton-St.-Edmund, and Sutton-St.-James. Area 25,141 acres. Pop. in 1831, 5,233; in 1851, 6,501.

**SUTTON-IN-ASHFIELD**, a parish in Notts, 3½ m. SW by W of Mansfield, in the line of the Mansfield and Pinxton railway, including the hamlet of Hucknall-under-Huthwaite, with the extra-parochial district of Fulwood. Area 6,040 acres. Pop. in 1831, 5,784; in 1851, 7,692.

**SUTTON-BASSET**, a parish in Northamptonshire, 3 m. NE of Market-Harborough, bounded on the W by the Welland. Area 720 acres. Pop. 166.

**SUTTON-BENGER**, a parish in Wilts, 4 m. NNE of Chippenham. Area 1,173 acres. Pop. 436.

**SUTTON-BINGHAM**, a parish in Somersetshire, 3 m. SSW of Yeovil. Area 549 acres. Pop. 75.

**SUTTON-BONNINGTON**, a parish in Nottinghamshire, 11 m. SSW of Nottingham, bounded on the W by the Soar, and intersected by the Midland Counties railway. Area 1,910 acres. Pop. 1,220.

**SUTTON-UNDER-BRAILS**, a parish in Gloucestershire, 4 m. SE by E of Shipston-upon-Stour. Area 1,135 acres. Pop. in 1831, 239; in 1851, 210.

**SUTTON-CHEYNEY**, a chapelry in the p. of Market-Bosworth, Leicestershire, 2 m. SSE of Market-Bosworth, near the Ashby-de-la-Zouch canal. Pop. in 1831, 335; in 1851, 340.

**SUTTON-COLDFIELD**, a parish and market-town in the co. of Warwick, 7 m. N by E of Birmingham. Area 13,030 acres. Pop. in 1801, 2,847; in 1831, 3,684; in 1851, 4,574. The town, which stands on an eminence, in the midst of a country generally poor and unproductive, is a place of considerable antiquity; having been of note in the time of the Saxons. The distinctive appellation 'Coldfield' is derived from the bleak and cheerless aspect of a large tract of land, recently enclosed, lying on the W side of the town. The houses are well-built, and the town presents a neat appearance. The principal manufactures carried on here were introduced from Birmingham within the last cent., and consist of gun-barrels, axes, saws, spades, and other implements.

**SUTTON-COURTNEY**, a parish in Berks, 2½ m. SSE of Abingdon, bounded on the N by the Thames, including the chapelry of Appleford, and the township of Sutton-Wick. Area 2,934 acres. Pop. 1,600.

**SUTTON-ST.-EDMUND'S**, a chapelry in the p. of Long-Sutton, Lincolnshire, 8 m. E by N of Crowland. Area 6,230 acres. Pop. in 1851, 757.

**SUTTON-ON-THE-FOREST**, a parish in the N. R. of Yorkshire, 8 m. N by W of York, containing

the townships of Huby and Sutton-on-the-Forest. Area 10,315 acres. Pop. in 1851, 1,146.

**SUTTON-ON-THE-HILL**, a parish in Derbyshire, 8 m. W by S of Derby, comprising the townships of Oslestone and Thurstaston, with the hamlet of Ash. Area 3,233 acres. Pop. in 1851, 550.

**SUTTON-AT-HONE**, a parish in Kent, 2½ m. SSE of Dartford, on the W bank of the Darent. Area 3,587 acres. Pop. in 1851, 1,290.

**SUTTON-ST.-JAMES**, a chapelry in the p. of Long Sutton, Lincolnshire, 10 m. E by S of Spalding. Pop. in 1831, 391; in 1851, 553.

**SUTTON-CUM-LOUND**, a parish in Nottinghamshire, 3½ m. NW by N of East Retford, watered by the river Idle. Area 4,370 acres. Pop. 870.

**SUTTON-MADDOCK**, a parish in Salop, 6 m. N of Bridgenorth, bounded on the W by the Severn. Area 2,662 acres. Pop. in 1831, 384; in 1851, 393.

**SUTTON-MALLET**, a chapelry in the p. of Moorlinch, Somersetshire, 5 m. E of Bridgewater. Area 878 acres. Pop. in 1831, 153; in 1851, 156.

**SUTTON-MANDEVILLE**, a parish in Wilts, 8 m. W by S of Wilton. Area 1,300 acres. Pop. 309.

**SUTTON-IN-THE-MARSH**, a parish in Lincolnshire, 5 m. NE of Alford, on the coast. Area 2,096 acres. Pop. in 1831, 183; in 1851, 323.

**SUTTON-SR.-MICHAEL**, a parish in Herefordshire, 4 m. N by E of Hereford, on the river Arrow. Area 679 acres. Pop. in 1831, 98; in 1851, 83.

**SUTTON-MONTIS**, a parish in Somersetshire, 5 m. N by W of Sherborne. Area 508 acres. Pop. in 1831, 178; in 1851, 179.

**SUTTON-SR.-NICHOLAS**, a parish in Herefordshire, 4 m. NE by N of Hereford. Area 724 acres. Pop. in 1831, 234; in 1851, 245.—Also a chapelry in the p. of Long Sutton, 5 m. E by N of Holbeach. Area 3,270 acres. Pop. in 1851, 849.

**SUTTON-UPON-TRENT**, a parish in Notts, 5½ m. SE of Tuxford. Area 2,930 acres. Pop. 1,262.

**SUTTON-VALENCE**, a parish and village in Kent, 6 m. SE of Maidstone. Area 2,132 acres. Pop. in 1831, 1,144; in 1851, 1,090. The village, which is situated on a rising eminence, possesses some good houses. It had formerly a strong castle, the remains of which, overgrown with ivy and brushwood, crown the brow of the hill which overlooks the village.

**SUTTON-VENEY**, a parish in Wilts, 3½ m. SE of Warminster, watered by the river Wiley. Area 3,580 acres. Pop. in 1831, 848; in 1851, 860.

**SUTTON-WALDRON**, a parish in Dorset, 5½ m. S of Shaftesbury. Area 1,613 acres. Pop. 257.

**SUTTON-UNDER-WHITSTONE-CLIFF**, a township in the p. of Felix-Kirk, N. R. of Yorkshire, 4 m. ENE of Thirsk. Area 1,854 acres. Pop. 376.

**SUTTON-WICK**, a township in the p. of Sutton-Courtney, Berks, 2 m. S by W of Abingdon, in the vicinity of the Wilts and Berks canal. Pop. 309.

**SUTTÖRF**, or **SUTTORP**, a village of Prussia, in the prov. of Westphalia, regency and 14 m. ENE of Arensburg, and circle of Lippstadt, on a height. Pop. 485. It has a large iron foundry.

**SUUL**, a hamlet of Norway, in the dip. and 48 m. NE of Drontheim, and bail. of North Drontheim, on the l. bank of the Suul-elv, a small affluent of the Vaerdals-elv.

**SUVERS**, or **SUPERS**, a village of Switzerland, in the cant. of the Grisons, 21 m. SSW of Coire, near the l. bank of the Posterior Rhine. Pop. 200. It has a forge and a marble quarry.

**SUVETE**, or **SUVETICE**, a village of Hungary, in the com. and 9 m. NNW of Gomor, on the r. bank of the Eltsch. It has manufactories of pottery.

**SUWALKI**, a town of Poland, capital of the gov. of Augustow, in the obwod and 20 m. N of August

towo, on the Hancza, an affluent of Lake Wigry. Pop. 5,000. It is regularly built and has 2 churches.

SUWANNEE, a river of the United States, which has its source in Okefinokee swamp, in the state of Georgia; flows first S, then W; receives the Alapahan and Willachuchee; again bends S, then SE, to the junction of the Santa-Fé, when it again takes a S direction, and ultimately flows by numerous channels into Waksase bay, in the gulf of Mexico. The bar at its mouth has not more than 5 ft. of water, but above it is navigable for 55 m. Its banks are lined with granite, rising in some places to the height of 100 ft.

SUWAT, SEWAT, or SWAT, a territory in the NE of Afghanistan, between the Indus on the E, and the Lundy or Punjura on the W, and running N towards the Hindu-Kush. It is composed of a narrow valley, nowhere above 3 m. wide. It is well-watered and fertile, and notwithstanding its position, possesses a good climate. The inhabitants, chiefly Euzufyes, are a brave and hardy race, and profess Mahometanism. The chief town is said to contain about 3,000 inhabitants.

SUXY, a department and commune of Belgium, in the prov. of Luxemburg and arrond. of Arlon. Pop. 677.

SUYEN, a lake of France, in the dep. of the Hautes-Pyrenees, cant. and 8 m. SSW of Auch, in the valley of Azun. It is traversed by the Gaved'Azun, and abounds in trout.

SUYERPUD, a commune of Belgium, in the prov. of E. Flanders, dep. of Waerschoot. Pop. 150.

SUYKERSTRAET, a commune of Belgium, in the prov. of E. Flanders, and dep. of Lede. Pop. 204.

SUYUD, a village of Sind, on the l. bank of the Narra, on the road from Omercote to Bukkur, and about 40 m. NW of the former town.

SUZANA, a town of Spain, in the prov. of Burgos, partido and 5 m. NNW of Miranda-de-Ebro. Pop. 130.

SUZANGE, a village of France, in the dep. of the Moselle, cant. and 5 m. SW of Thionville, and com. of Schzemange, from which it is separated by the Feusche. It has extensive iron-works.

SUZANNE (SAINT), a canton and commune of France, in the dep. of the Mayenne, and arrond. of Laval. The cant. comprises 10 com. Pop. in 1831, 9,884; in 1846, 10,755. The village is 21 m. E of Laval, on a hill, near the r. bank of the Erve. Pop. 1,619. It has a castle in ruins, and old ramparts, a portion of which are vitrified: apparently by the action of electricity, and possesses several paper-mills and lime-kilns. This was formerly a place of great strength, and in 1073 made a valorous though unsuccessful defence against William the Conqueror. In 1424 it was taken by the count of Salisbury.—Also a village in the dep. of the Doubs, cant. and 2 m. SW of Montbeliard, in a picturesque situation, on the r. bank of the Alan. Pop. 250.

SUZE (LA), a canton, commune, and town of France, in the dep. of the Sarthe, and arrond. of Mans. The cant. comprises 10 com. Pop. in 1831, 9,884; in 1846, 10,755. The village is 12 m. SW of Mans, on the l. bank of the Sarthe, which is here crossed by a fine bridge. Pop. 1,895. It has manufactures of hats, tent-cloth, wax-cloth, and pottery, and several tanneries, and carries on an active trade in wood, cloth, liqueurs, and iron-ware. In the vicinity are the ruins of the ancient castle of the counts of La Suze.

SUZE-LA-ROUSSE, a commune of France, in the dep. of the Drôme, cant. and 10 m. SE of Pierrelatte, finely situated at the foot of a hill, crowned with a Gothic castle flanked with towers, and on

the l. bank of the Lez. Pop. 1,668. It is enclosed by old walls. Near the SE gate is a covered hall, and outside is a fine promenade. It has manufactures of silk, and several lime and tile-kilns.

SUZEVIL, a commune of Belgium, prov. of Brabant, dep. of Court-Saint-Etienne. Pop. 103.

SUZON, a river of France, in the dep. of the Côte-d'Or, which has its source a little to the N of the village of Pange, at the foot of the mountain of Tasselot; runs NE through the Val Courbe and Val-de-Suzon; bends afterwards SE; passes Dijon, and after a course of about 20 m., joins the Ouche, on the l. bank, and near the suburb of the same name. It was formerly a stream of considerable size, but now leaves its bed nearly dry in summer.

SUZY, a village of France, in the dep. of the Aisne, and cant. of Anizy-le-Chateau, and 2 m. from Laon. Pop. 686.

SUZZARA, or SUZARA, a town of Austria, in Lombardy, in the gov. of Milan, delegation and 15 m. S of Mantua, on the Old Po.

SVABOCZ, SCHWALSDORF, or SWABOWCE, a village of Hungary, in the comitat of Zips, 8 m. SSW of Kaysmark, on a mountain.

SVALOVA-LOUTCHKA, a town of Russia in Europe, in the gov. and 105 m. SE of Kharkov, district and 33 m. SE of Koupiansk, on the r. bank of the Krasnaia.

SVANETES, or SOUTANES, a people of Western Circassia, who inhabit the central part of the Caucasus, near the N frontiers of Abasia, Mingrelia, and Imirilia.

SVANIKE, a town of Denmark, on the E coast of the island of Bornholm, 6 m. N of Nexøe. Pop. 820. It has a church, an hospital, a charity school, and distilleries of brandy. The harbour formed by a small bay affords good anchorage in 7½ ft. water.

SVAPA, a river of Russia in Europe, which has its source in the gov. of Orel, and district of Kromi, near the sources of the Oka; enters the gov. of Koursk; and after a course in a generally SW direction, of about 90 m., throws itself into the Seim, on the r. bank, and 15 m. W of Lgov.

SVART-ELV, a river of Sweden, which has its source in the S part of the prefecture of Stora-Kopparberg, flows thence immediately into the pref. of Carstad, and thence into that of Oerebro, and after a total course of about 102 m. throws itself into Lake Skagern.

SVARTSIOELANDET, an island of Sweden, the largest and most populous in Lake Maelar, in the prefecture and 11 m. W of Stockholm. It contains the castle of Svartsioe.

SVEABORG. See SWENABORG.

SVELRIGEN, a town of Norway, in the diocese of Aggershuus, and county of Jarlsberg, on the W coast of the Drammen-fjord. It has a glass-work.

SVENDBORG, a town of Denmark, in the stift and on the S coast of the island of Fyen, 27 m. SSE of Odensee, at the N end of the Svendborg channel, by which it is separated from the island of Taasing. Pop. 3,150. It is enclosed by a wall, and has two churches, a town-house, a Danish school, a small theatre, and an hospital. It has extensive building-docks, several tanneries, manufactures of glue, tobacco, and pottery, numerous distilleries, the larger of which consume from 500 to 600 tons of grain in the year. The harbour is spacious and admits vessels drawing 14 ft. water. It possesses an active trade, consisting chiefly in grain, skins, poultry, linseed, oil, and linen; it has also a considerable business in ship-building.

SVENSKA-SKELEFTEA. See SILDUT.

SVENTITSKOE, a lake of Russia in Europe, in the gov. of Minsk, district and 45 m. N of Pinsk, on the confines of the gov. of Grodno. It is 6 m. in



length, and  $1\frac{1}{2}$  m. in breadth, and is traversed by the Oghinski canal.

**SVERHOLT**, a headland of Norway, in the diocese of Nordland, and bail. of Finmark, in N lat.  $71^{\circ}$ , and E long.  $26^{\circ} 35'$ , 24 m. SE of Cape North. It forms an acute elevation advancing into the Frozen ocean between the Porsanger-fiord on the W, and the Lags-fiord on the E. Large quantities of garnet are found in the micaceous schist of which it is partly composed.

**SVIAGA**, or **SVIAJA**, a river of Russia in Europe, which has its source in the gov. of Simbirsk, and district of Syzran, near Dvorienskoe; runs N; passes Simbirsk, enters the gov. of Kazan, and after a course of about 210 m., throws itself in the Volga, on the r. bank, and near Svajsk. This river flows in an inverse but nearly parallel course to the Volga, and at about 150 m. above its confluence, is only separated from that river by the hill on which Simbirsk is situated.

**SVIAJSK**, a town of Russia in Europe, in the gov. and district and 21 m. WSW of Kazan, on the slope of a mountain, to the l. of the Siaga, and a little above its confluence with the Volga. Pop. 1,125. It presents from the Volga side a fine aspect. The houses, although generally small, are neat, and the churches seven in number, well-built. It has besides two convents, and contains a potash manufactory, and several tanneries. The trade consists chiefly in grain and flour. S. was built in 1551 by Ivan-Vasilivitch, in contemplation of his second attack against Kazan.

**SVIATOL-NOS**, or **CAPE SAINT**, a headland of Russia in Asia, in the prov. of Yakutsk and district of Verkhoiansk, opposite the archipelago of New Siberia, and between the embouchures of the Yana and Indighirka.—Also a peninsula in the district of Verkhni-Oudinsk, which advances into the E part of Lake Baikal, to the W of Barguminsk.—Also a headland of Russia in Europe, in the gov. of Arkhangel, a little to the N of the embouchure of the Dwina, in N lat.  $64^{\circ} 59' 27''$ , and E long.  $40^{\circ} 25' 10''$ .

**SVIATOI**, a group of islets in the Caspian sea, to the N of the peninsula of Tukkaragan, on the coast of Turkomania, and near the entrance to the gulf of Kochakkultuk, in N lat.  $44^{\circ} 52'$ , and E long.  $50^{\circ} 30'$ .

**SVIATZKAIA**, a town of Russia in Europe, in the gov. and 90 m. NNE of Tchernigov, and district of Novo-Zibkov.

**SVINIOUKHI**, a town of Russia in Europe, in the gov. of Volhynia, 27 m. SE of Vladimir.

**SVINOI**, a small island of the Caspian sea, near the coast of Shirvan, and opposite the mouth of the Persagat.

**SVIR**, a river of Russia in Europe, in the gov. of Olonetz. It issues from the SW extremity of Lake Onega; runs WSW; passes Ladeinoe Pole, reaches the confines of the gov. of St. Petersburg, and after a course of about 150 m., throws itself into Lake Ladoga, on the E side, 36 m. NNE of Novgia-Ladoga. Its principal affluents are the Ivina and Vagena, which it receives on the r., and the Gat and Pacha on the l. The canal of Siaskoi or Svir connects this river with the Polkhov, and forms a means of communication between St. Petersburg and the surrounding provinces. Its navigation, which was impeded to some extent by rapids, is rapidly improving. Several building-docks have been established on its banks. Its waters abound with fish.—Also a town in the gov. and 45 m. ENE of Vilna, and district of Swinziani, at the N extremity of a lake of the same name, 12 m. in length, and 3 m. in extreme breadth.

**SVIRANKI**, a town of Russia in Europe, in the gov. and 86 m. ENE of Vilna.

**SVISLOTCH**, a town of Russia in Europe, in the gov. and 54 m. S of Grodno, and district of Volkovisk.—Also a town in the gov. and 74 m. SE of Minsk, and district of Bobrouisk, at the confluence of a river of the same name with the Berezina.—The river S. has its source in the same gov. near Sonkovitchi; runs SE; passes Minsk; and after a course of about 105 m., joins the Berezina on the r. bank, at the town of the same name.

**SVUCKUFIAELL**, a mountain of Sweden, on the Norwegian frontier, between the prefectures of Jaemtland and Stora-Kopparberg, and to the E of Lake Faemund, in N lat.  $62^{\circ} 14'$ , E long.  $12^{\circ} 20'$ . It has an alt. of 4,586 Parisian ft. above sea-level.

**SWABIA**. See **SCABIA**.

**SWABY**, a parish in Lincolnshire, 5 m. WNW of Alford. Area 1,160 acres. Pop. in 1851, 474.

**SWACLIFFE**, or **SWALCLIFF**, a parish in Oxford, 5 m. WSW of Banbury. The parish includes the chapelries of Epwell and Shutford. Area 6,270 acres. Pop. in 1831, 1,962; in 1851, 2,012.

**SWADLINGCOTE**, a hamlet in the p. of Church-Gresley, Derbyshire, 5 m. SE of Burton-on-Trent. Pop. in 1831, 645; in 1851, 1,007.

**SWAENTJEN**, a commune of Belgium, in the prov. of E. Flanders and dep. of Sleydinge. Pop. 586.

**SWAFFHAM**, a parish and market-town in Norfolk, 27 m. W of Norwich, and 18 m. NNW of Thetford. Area of p. 7,550 acres. Pop. in 1831, 3,285; in 1851, 3,858. The church is a handsome cruciform structure, having a nave, aisles, transepts, and a lofty tower. It contains some fine monuments.—The town is situated on an eminence, and is regarded as one of the handsomest in the county. The streets are wide and well-built; diverging in various directions from a spacious market-place. A heath, extending to some thousands of acres on the NW side of the town, affords ample scope for horse-racing and coursing. S. is the principal place of election for the W division of the county.

**SWAFFHAM-BULBECK**, a parish in Cambridgeshire, 7 m. ENE of Cambridge. Area 3,000 acres. Pop. in 1831, 727; in 1851, 888.

**SWAFFHAM-PRIOR**, a parish in Cambridgeshire, 5 m. W by N of Newmarket. Area 5,297 acres. Pop. in 1831, 1,102; in 1851, 1,384.

**SWAFIELD**, a parish in Norfolk, 2 m. N by E of North Walsham. Area 826 acres. Pop. in 1851, 181.

**SWAINSTHORPE**, a parish in Norfolk,  $4\frac{1}{2}$  m. S by W of Norwich, watered by a branch of the Yare, and intersected by the London and Norwich railway. Area 821 acres. Pop. in 1851, 349.

**SWAINSWICK**, a parish in Somersetshire, 3 m. N by E of Bath. Area 845 acres. Pop. 604.

**SWALE**, a river which, rising in the W extremity of the north riding of Yorkshire, waters the romantic tract called Swaledale. Passing Richmond and Catterick, it enters the vale of York, where it receives the small river Wiske, and continues its course till it joins the Ure at Myton, a few miles below Boroughbridge, after a course of 68 m.

**SWALE (EAST and WEST)**, two branches of the Medway, noted for their oyster beds. The former, which is navigable for vessels of 200 tons burden, separates the Isle of Sheppey from the main land, and falls into Whitstable bay; the latter enters the Thames on the west side of Sheppey.

**SWALECLIFFE**, a parish in Kent,  $6\frac{1}{2}$  m. N of Canterbury, to which town it has a railway. Area 1,297 acres. Pop. in 1831, 133; in 1851, 176.

**SWALHEIM**, or **SCHWALHEIM**, a village of Electoral-Hesse, in the prov. and circle and 15 m. NNW

of Hanau, and bail. of Dorheim, on the L. bank of the Wettu. It is noted for its mineral waters.

**SWALLOW**, a parish in Lincolnshire, 4 m. E by N of Caistor. Area 2,790 acres. Pop. in 1851, 215.

**SWALLOWLIFE**, a parish in Wilts, 5 m. SE of Hindon. Area 1,344 acres. Pop. 273.

**SWALLOWFIELD**, a parish, partly in Berks, and partly in Wilts, 6 m. S by E of Reading. Area 3,712 acres. Pop. in 1831, 1,106; in 1851, 1,213.

**SWALLOW-HARBOUR**, a harbour of the islands of Santa Cruz, S. Pacific, on the NE coast of the island of that name, in S lat.  $11^{\circ} 45'$ , E long.  $166^{\circ}$ .

—Also a harbour of the strait of Magalhaens,  $1\frac{1}{2}$  m. to the W of Snowy sound, in S lat.  $53^{\circ} 31'$ , and W long.  $72^{\circ} 37'$ . It has three islands and a rock at its entrance, but these are rendered easily distinguishable by the quantity of kelp by which they are covered. Within it has a depth of from 16 to 40 fathoms, and is well sheltered from all winds. Around are steep snowy mountains, destitute apparently of any living creature.

**SWALWELL**, a township in the p. of Wickham, co.-palatine of Durham,  $3\frac{1}{2}$  m. W by S of Gateshead, on the Tyne, in the line of the Carlisle and Newcastle railway. It is the seat of extensive iron-works, established in 1690, by Sir Ambrose Crawley, and where are manufactured all kinds of articles, either in cast or wrought iron. Pop. in 1831, 1,372; in 1851, 1,429.

**SWAN**, a river of the Punjab, which has its source in a ramification of the Himalaya, in N lat.  $33^{\circ} 55'$ , and E long.  $73^{\circ} 10'$ , flows SW, and falls into the Indus, 10 m. below Makkud.

**SWAN**, a township of Vinton co., in the state of Ohio, U. S., 49 m. SE of Columbus, watered by Racoon river. Pop. in 1850, 1,154.

**SWAN**, a creek of New South Wales, in the district of Darling Downs, an affluent of the Condamine.—Also a lake in the co. of St. Vincent, near St. George's basin, 122 m. from Sydney.

**SWANAGE**, or **SWANWICH**, a parish and market-town in Dorset, 5 m. SE by E of Corfe-castle, on the coast of the Isle of Purbeck. Area of p., 3,163 acres. Pop. in 1801, 1,382; in 1831, 1,734; in 1851, 2,139. The town, which is situated on a small bay midway between St. Alban's head and Poole harbour, consists of one street nearly a mile in length. A spacious hotel has recently been erected, and there are several commodious lodging-houses, which have been frequented for the purpose of sea-bathing. Many of the inhabitants are employed in quarrying freestone for building and paving, immense quantities of which are annually exported from this place. The quarries are contained in the high land which rises abruptly behind the town, and stretches back for some miles in the direction of Corfe-castle and Kingston. The district is rich in sandstone and in Portland marble, and is perforated in all directions like a huge catacomb by the workings for stone. The bay, which serves as a harbour to the town, affords tolerable anchorage for vessels of 300 tons burden. The herring-fishery here, and the business of herring-curing, first established in 1788, still continue to flourish.

**SWANBOURNE**, a parish in Bucks, 2 m. E by S of Winslow. Area 2,540 acres. Pop. 646.

**SWAN ISLES**, a small group of islets in Bank's strait, near the NE extremity of Van Diemen's Land, in S lat.  $40^{\circ} 42' 26''$ , and E long.  $148^{\circ} 19' 9''$ .

**SWANLAND**, a township in the p. of North-Ferriby, E. R. of Yorkshire, 7 m. W of Kingston-upon-Hull. Area 4,118 acres. Pop. in 1851, 457.

**SWANLINBAR**, a village in the p. of Kinawley, co. Cavan,  $9\frac{1}{2}$  m. S by W of Enniskillen. Pop. 406.

**SWANNINGTON**, a chapelry in the p. of Whit-

wick, Leicestershire,  $3\frac{1}{2}$  m. E of Ashby-de-la-Zouch, in the line of the Leicester and Swannington railway. Coal abounds in the chapelry, and is worked to a considerable extent. To facilitate its transport a railway has been formed to Coleorton. Area 1,450 acres. Pop. in 1831, 549; in 1851, 822.—Also a parish in Norfolk, 9 m. NW by N of Norwich. Area 1,433 acres. Pop. in 1851, 395.

**SWAN RIVER**, a river of South-Western Australia, which has its sources in Granton and Minto counties; flows under the name of Avon, in a generally NNW direction through York co., to the SW corner of Victoria co., where it is joined by the Toodyay; thence bends in a SW direction, crosses the NW corner of York co., and enters the co. of Perth, where it takes its distinctive appellation; receives the Howick and Ellen-Brook rivers on the r., and the Helena on the l., and expands into a small lake. Issuing thence it runs near Guildford, and reaching the rich flats around the city of Perth, again expands into a considerable lake, named Perth-water, and a little below with the accumulation of the waters of Canning river, it forms another expansion distinguished as Melville-water. After a total course of 180 m., it ultimately discharges itself into the ocean at Freemantle. The chief towns on its banks, besides those already named, are York, Toodyay and Guildford. The S., in common with all Australian rivers, is subject to sudden and disastrous inundations. It was discovered in 1696 by Vlaming.—The colony which takes its name from this river was founded in 1829, on the banks of the Swan and the Canning rivers. It is now identified with the colony of WESTERN AUSTRALIA. See that article under the general head of AUSTRALIA. Wool is the great staple of the district. The other chief articles of export are horses and Kangaroo-skin leather. The vine and olive are successfully cultivated; and the forests supply timber in abundance.

**SWAN - RIVER**, a district of British North America, to the E of Winipigoos and Manitoba lakes, and intersected by a river of the same name, which issues from Ettowemahmee lake, sweeps in a W direction, expands into Swan lake, about 15 m. in length, and after a total course of about 240 m., throws itself into Lake Winipigoos. An establishment has been formed by the British North West company, near the junction of the river and lake.

**SWAN - RIVER**, or **ARTHUR'S FERRY**, a settlement in Renton co., in the Minnesota Territory, 107 m. NNW of St. Paul. It contained in 1855 about 810 families.

**SWANSCOMBE**, a parish in Kent, 4 m. E of Dartford. Area 2,593 acres. Pop. in 1851, 1,763.

**SWANSEA**, a town of Van Diemen's Land, in the co. of Glamorgan, on Oyster bay, 74 m. from Hobart Town.

**SWANSEA**, or **ABER-TAWCY**, a parish, parl. borough, and sea-port, in the hund. of Swansea, co. of Glamorgan, South Wales, 28 m. WSW of Merthyr-Tydvil, on the W bank of the river Tawey, which falls into the British channel at Swansea-bay, and on the line of the South Wales railway. Pop. in 1811, 8,963; in 1831, 14,931; in 1851, 14,902.—This thriving town, which is finely situated on the beautiful semicircular bay of Swansea, has a handsome appearance. The houses are well-built; the streets are broad, and the suburbs present many pleasing villas. The harbour is now not only one of the most beautiful, but one of the most secure in the kingdom, and of great value to the navigation of the British channel. Two fine piers confine the channel on the E and W sides, and the bed of the river has been deepened, so that vessels



of 300 tons burden receive their cargoes at the wharfs along its banks. On the W pier are a watchhouse and lighthouse, with a terrace which commands a rich view of the bay, the town, and the surrounding country. Further improvements on the harbour, of an extensive nature, comprehending floating docks, with numerous shipping wharfs, and a depth of water sufficient for the accommodation of vessels of the largest class, were latterly projected; and, in 1841, a company was formed for the purpose of carrying out these improvements; and also for the establishment of a railway communication between Swansea and Lloughor. The principal business carried on is the smelting of copper; the ore of which is brought hither from Cornwall and Ireland, and even from Cuba and Chili. See article GLAMORGAN. The copper works are ranged, at small intervals, along the banks of the river,—3 on the l. bank, and 5 on the r. There are also several extensive iron-foundries, two very extensive potteries, rope-walks, breweries, and tanneries. The trade of the port is very considerable. Ship-building is carried on; and coal, stone-coal, and culm, iron-ore, limestone, clay, rotten-stone, tin-plates, bituminous coal, and culm, and timber, are brought to S. for its own consumption, or for exportation either inwards or outwards. A recent statistical writer gives the following details of the rise and progress of the trade of this place: "Three great advantages, united in S., seemed to point to this place as the locality best fitted for copper-works on the Welsh coast. First, it offered a cheap and abundant supply of coal raised literally at the water's edge; secondly, it possessed a sheltered and secure roadstead for vessels; lastly, it had the advantage of proximity to the mines of Cornwall, which lessened the expense of carriage to and fro. Eventually these circumstances secured for this town a preference over all other places for the establishment of copper-works. The effect produced by this location of the copper trade was equally striking and beneficial. From being an insignificant town, lying between verdant hills, near the mouth of the river, with only two prominent objects to vary its outline—a massive church tower, and an old Norman castle—and having only small trade in coal, carried on by smacks and sloops, with the opposite coast—S. enlarged tenfold. Extensive piers were built, enclosing a capacious harbour; ships, bargues, and other vessels of heavy burden, trading with the most distant parts of the globe, thronged the river; commodious quays and lines of lofty warehouses were constructed, which became the scene of active enterprise and thriving business. Instead of the long trains of mules, laden with sacks of coal, which were formerly seen winding their way, with something of Spanish picturesqueness, along the slopes of the adjacent mountains, down to the crazy shipping-stages at the water's edge, canals were cut, and rail and tram-roads were opened, to the sources of all this prosperity—the coal-pits and works up the valley of the Tawey. Internally, the change was no less remarkable. New churches and chapels, a spacious market-house with a lofty and prominent tower, a philosophical institution, and spacious law courts—all having greater or less architectural pretensions—were built; and the town, stretching away from the river along the foot of the mountain, parallel to the bay, presented a new face of elegant villas to those who approached it by the sea. The increase of pop. during the present century has been six-fold. At present the pop., inclusive of the district of the copper-works, is calculated at 40,000." The increase of the shipping-trade has been also great. The vessels which entered the port of

S., in 1768, were 694; in 1830, 2,277; in 1845, 4,569; in 1851, 4,418. The foreign trade, which has chiefly arisen since 1827, when the first cargo of foreign copper was brought here, has advanced very rapidly. The number of ships trading to foreign ports in 1814 was only 4; in 1834 it was 46; in 1840, 328; in 1844 it amounted, inwards, to 163, and outwards, to 437, with cargoes. In 1847 not less than 158 foreign vessels of an aggregate burden of 38,967 tons, with cargoes, and 148 vessels of 15,296 tons, in ballast, entered S. The duties paid at the custom-house in 1831 were £4,767; in 1846 they exceeded £70,000. The following were the returns of the shipping trade for 1849. (1.) Foreign trade, Number of vessels entered inwards with cargoes, 205, bringing 48,000 tons; outwards, with cargoes, 438, taking 50,000 tons. Inwards, with ballast, 112; tonnage, 9,000; outwards, with ballast, 16; tonnage, 3,600. (2.) Coasting trade, Number of vessels entered inwards with cargoes 4,000, bringing 263,000 tons; vessels outwards with cargoes, 6,000, taking 355,000 tons. In addition to the above about 100 vessels arrived in ballast, and about 200 cleared out in ballast. Out of 205 vessels entering inwards from foreign parts, 18 of 600 tons burden each, brought copper ore and wool from Australia.—The principal trade of S. is of course in copper ores, with S. America, Cuba, and Australia, in foreign parts, and with Cornwall and Ireland for home-raised ores. But this port also enjoys no inconsiderable trade in coal. There were shipped of coals, culm, and cinders in 1838, 476,265 tons, in 1848, 434,485 tons.—The parl. boundaries of S. include the town and franchise of Swansea, with the hamlet of St. Thomas, the parish of St. John, part of the hamlet of Lower-Clase, in the parish of Llange-felach, and parts of the hamlets of Higher and Lower Llensamlet. The income of the incorporation in 1840 was £3,460. Under the reform act Swansea, in conjunction with Neath, Lloughor, Aberavon, and Kenfig, returns one member to parliament. Pop. of parl. borough 31,461. The number of electors registered in 1837 was 1,354. S. is a polling-place at the county elections.

SWANSEY, or SWANZEY, a township of Bristol co., in the state of Massachusetts, U. S., 48 m. S by W of Boston, indented on the S by an arm of Mount Hope bay. Pop. in 1840, 1,484; in 1850, 1,554.—Also a township of Cheshire co., in the state of New Hampshire, 53 m. SW of Concord. It is watered by Aishuelot river, and has a considerably diversified surface. Pop. in 1840, 1,755; in 1850, 2,106. The village is on the Connecticut river railroad.

SWANTON, a township of Franklin co., in the state of Vermont, U. S., 71 m. NW of Montpelier, bounded on the W by Lake Champlain, and watered by Mississque river, and intersected by the Vermont Central railroad. Pop. in 1840, 2,312; in 1850, 2,824.

SWANTON-ABBOT, a parish in Norfolk, 12 m. N by E of Norwich. Area 2,130 acres. Pop. in 1831, 448; in 1851, 638.

SWANTON-MORLEY, a parish in Norfolk, 3½ m. NE by N of East Dereham, watered by the Wensum. Area 2,714 acres. Pop. in 1851, 806.

SWANTON-NOVERS, a parish in Norfolk, 10 m. SE of Wells. Pop. in 1851, 348.

SWANVILLE, a township of Waldo co., in the state of Maine, U. S., 43 m. E by N of Augusta, drained by an affluent of Belfast bay. Pop. in 1850, 944.

SWARBY, a parish in Lincolnshire, 5 m. NNW of Folkingham. Area 910 acres. Pop. in 1851, 208.

SWARDESTON, a parish in Norfolk, 4 m. SSW of Norwich. Area 933 acres. Pop. in 1851, 381.

**SWARKESTON**, a parish in Derby, 5 m. SE of Derby, on the N bank of the Trent, and crossed by the Grand Trunk canal. Area 943 acres. Pop. in 1831, 308; in 1851, 289.

**SWARLAND**, a township in the p. of Felton, Northumberland, 8 m. S by W of Alnwick, and N of the river Coquet. Pop. in 1851, 174.

**SWARRATON**, a parish in Hants, 3 m. NW by N of New Alresford. Area 743 acres. Pop. in 1831, 120; in 1851, 93.

**SWART-AU**, or **SWARTA-AU**, a river of Sweden, in the prefecture of Linköping, which issues from the NW extremity of Lake Sommen; runs NNE; and, after a sinuous course of about 45 m., enters Lake Roxen.

**SWARTEGAT**, a commune of Belgium, in the prov. of E. Flanders, and dep. of Nazareth. Pop. 877.—Also a com. in the prov. of W. Flanders, and dep. of Oostcamp. Pop. 188.

**SWATARA**, a township of Lebanon co., in the state of Pennsylvania, U. S., 9 m. N of Lancaster. It is hilly in the N and S, and is drained by a river of the same name, an affluent of the Susquehanna.

**SWATON**, a parish in Lincolnshire, 5 m. ENE of Folkingham. Area 3,670 acres. Pop. in 1851, 301.

**SWATTERAGH**, or **SWATRAGH**, a village in the p. of Maghera, co. Londonderry,  $4\frac{1}{2}$  m. S of Kilrea. Pop. in 1831, 214; in 1851, 222.

**SWAVESEY**, a parish in Cambridgeshire,  $3\frac{1}{2}$  m. SE by E of St. Ives. Area 3,891 acres. Pop. in 1831, 1,115; in 1851, 1,385.

**SWAYFIELD**, a parish in Lincolnshire,  $9\frac{1}{2}$  m. SE by S of Grantham. Area 1,300 acres. Pop. in 1831, 260; in 1851, 383.

**SWEABORG**, or **SVEABORG**, an important Russian fortress, in the gulf of Finland, 3 m. SE of Helsingfors, from the quays of which, says Dr. Milner, its granite ramparts may be seen, with the roof of the buildings it contains, consisting of barracks, magazines, prisons, and a limited number of private houses. It completely commands the seaward passage to the city, or the narrow Gustaf-sound, the only channel which has water deep enough for large vessels. The fortifications extend over six islands, or rather rocks, Langörn, Lilla-Swärtö, Vester-Swärtö, Oster Swärtö, Vargön, and Gustafsvärd. The last five are connected by bridges, and occupy a space of about 1,200 by 650 yds. Vargön is considered the citadel, and is somewhat central. The only practicable passage between the islands lies between Treksholm and Gustafsvärd. All these islands bristle with cannon, and are grim with ramparts. The works, which are of granite, and are as massive as the foundations upon which they are built, being for the most part constructions out of the solid rock, are said to mount 810 cannon, to have casemates for from 6,000 to 7,000 small arms, and barrack-room for a garrison of 12,000 men. Count Ehrenswärd, field-marshal of Sweden, superintended the construction of the first fortress, the citadel of Vargön, begun in 1747 and finished in 1758, during the reign of Adolphus Frederic. The surrender of S. to the Russians in the year 1808 is one of the most extraordinary events in military history. Sweden intrusted its defence to Admiral Count Cronstedt, a man whose courage had been tested on many occasions, and whose character was above suspicion as to moral probity till the capitulation amply justified it. The garrison was composed of above 7,000 men, partly Swedes, partly Finns. On the 6th of March, while the sea was yet covered with ice, the Russians commenced the siege of this place, with eleven battalions, four squadrons, and four field-batteries. The transport of the guns of the besiegers was a matter of the greatest difficulty. The heavy artil-

lery had to be brought on sledges from Russia. During the whole of the time that the siege was carried on, the number of artillery never exceeded 46 pieces of cannon, of which 16 were mortars. The Russians kept the place in a continued state of alarm, by constant attacks, during the whole of March and part of April, and the morale of the officers and men, on the part of the besiegers, began to deteriorate. At length, on the 5th of April, Count Cronstedt, the Swedish commander, agreed to an armistice, and a convention was agreed upon between him and De Suellfelen, the Russian chief engineer, that the truce should be continued until the 3d of May, and that if by that time the fortress were not effectually relieved by the arrival of at least five ships of the line, it should be given up to the Russians. The relief never arrived, and the Russian general took possession of the place. At the time of its capture it contained 58 pieces of brass ordnance, 1,975 iron guns, 9,535 cannon cartridges, 3,000 barrels of powder, 10,000 cartridges, 340 projectiles, nearly 9,000 stand of arms, with other weapons, 2 frigates, 6 xebecs, a brig, 6 yachts of war, 25 gun-boats, 51 others, called yawls, 51 barques, sloops, &c., 19 transports, an immense depot of naval stores, and considerable magazines. It may be assumed that in the forty-six years since S. was taken, the fortifications have been greatly improved; but the resources of besieging armies have improved in the same ratio. See HELSINGFORS.

#### SWEDEN AND NORWAY (KINGDOM OF),

A state of Northern Europe, comprising that great semicircular continent which stretches from Cape North, the extreme point of the European continent, into the Baltic, and is united to Russia on the NE, but which formed until recent times two distinct kingdoms,—the eastern and larger country called Sweden, the western, Norway. Both these kingdoms continued independent of each other from the dissolution of the treaty of Calmar: Norway being united to the crown of Denmark, and S. forming an independent kingdom. United in 1814 under one ruler, they remain distinct kingdoms in as far as regards their political constitution and administration: the law which binds the Swede affecting not the Norwegian, and it being possible, technically speaking, for either country to go to war without implicating the other in the contest. Since its incorporation with S., Norway has attained a position which it had never enjoyed when attached to the crown of Denmark. By the fifth article of the treaty of Kiel, the king of S. bound himself in the most solemn manner to cause the inhabitants of the kingdom of Norway and its dependencies to enjoy in future all the laws, franchises, rights, and privileges as they had hitherto subsisted. On his part, the king of S. renounced, in behalf of the king of Denmark, all rights and claims to the dukedom of Swedish Pomerania and the principality of the island of Rugen. The Norwegians did not at first willingly consent to be handed over to S. A war ensued. It was not till November 1814, that the final junction of Norway with S. was completed. On the 20th Oct., the Norwegian diet, by a majority of 74 voices to 5, adopted the following resolution: "Norway shall as an integral state be united to S. under one king, with the preservation of its constitution, subject to such necessary alterations as the welfare of the country may require, having at the same time regard to the union with S. Those alterations which his Swedish majesty has recognised in the convention of Moss are to be considered and determined on by the diet as speedily as possible; and



as soon as this has been done, the diet will solemnly elect and acknowledge the king of S., his Majesty Charles XIII., as the constitutional king of Norway." The election of the king took place on the 4th November 1814, with entire unanimity. We therefore describe these kingdoms as separate articles, under the respective heads of NORWAY and SWEDEN.

The united kingdom of S. and Norway possess, next to Russia, the greatest superficial extent of territory among the kingdoms of Europe. The total superficies of the two countries is estimated by Hassel at 323,360 sq. m.; of which 172,189 belong to Sweden, and 151,171 to Norway. Ungewitter estimated the united area at 13,770 German sq. m.; and Hagelsteife's map, constructed in 1820, gives 294,000 English sq. m. to S. Swedish geographers assign 2773·89 Swedish sq. m. to Norway, 3868 Swedish sq. m. to Sweden; making a total of 6641·89 Swedish, or 293,447 English sq. m. But the pop. of these regions bears only a small proportion to their extent. It was reckoned by Balbi, in 1826, at 3,866,000, of whom only about 2,790,000 belonged to S., and 1,076,000 to Norway; the pop. of S., in 1850, was 3,482,541; that of Norway, in 1845, 1,328,471. Though in the southern provs. of S. the number of persons to the sq. m. is about 100, and in the middle provs. nearly 40; the extreme northern give only 1½, and the whole of S. little more than 18 persons per sq. m.; whilst Norway exhibits an almost doubly greater disproportion of pop.

SWEDEN, or as it is called in the language of the country, SWERIGE, or SWEA RIKE, 'the land of the Swiar,' or 'Sweones,' is situated entirely within the cold zone of Northern Europe. It is bounded on the N and NE by Russia; on the E by the gulf of Bothnia; on the SE and S by the Baltic; on the SW by the Sound, the Cattegat, and the German ocean; and on the W by Norway, from which it is separated by an extensive range of mountains. On the Russian side, S. is protected from sudden invasion by extensive and almost pathless wilds; and its iron-bound coasts are in few places accessible to invading fleets. Its greatest length, from the frontiers of Lapland, on the NE, to Schonen, on the SW, is about 1,200 m.; its greatest breadth, since the loss of Finland, 350 m.; its average breadth is about 190 m.—The modern subdivision of S. into 24 *laens*, is noticed in a subsequent paragraph of this article; but the following table of the old and modern divisions, as existing in 1820, with the area of the latter, given by Hassel, will be found useful in the perusal of nearly all works entering into geographical details regarding S.:

Old divisions.	New divisions.	Area.
<b>I. GOTTLAND.</b>		
East Gottland, . . .	Linköping, . . .	4,726
	Calmar, . . .	4,243
Smaaland, . . .	Jönköping, . . .	4,414
	Kronberg, . . .	3,793
Biekingen, . . .	Biekingen, . . .	1,137
	Skaraborg, . . .	3,393
West Gottland, . . .	Elfsborg, . . .	5,045
	Gottenburg, . . .	1,906
Halland, . . .	Halmstad, . . .	1,906
Schonen, . . .	Christianstad, . . .	2,439
	Malmö, . . .	1,456
Gottland island, . . .	Gottland, . . .	1,262
Oeland island, . . .	Oeland, . . .	300
<b>II SWEDEN PROPER.</b>		
Upland and part of Suder-	Stockholme, . . .	2,916
mannland, . . .	Upsala, . . .	2,092
Westmannland, . . .	Westerås, . . .	2,545
Sudermannland, . . .	Nyköping, . . .	2,512
Nerica, . . .	Oerebro, . . .	3,270
Wermeland, . . .	Carlstadt, . . .	6,057
Dalecarlia, . . .	Stora-Kopparberg, . . .	12,282

<b>III. NORRLAND.</b>		
Gestricia, . . .	} Gefleborg . . .	7,542
Helsingland, . . .		
Jämtland, . . .	Jämtland, . . .	19,618
Swedish Lapland, . . .	North Bothnia, . . .	33,090
West Bothnia, . . .	West Bothnia, . . .	29,435
Angermannland, . . .	West Norrland, . . .	9,516
Total, . . .		171,015

[Physical features.] From the coast of the North sea to the Wener and Hielmar lakes, and even to the Bothnian gulf, Scandinavia presents an inclined plane, whose summit is terminated by the grand Norwegian chain, which runs nearly parallel with the coast, at the distance of from 30 to 40 m. from Cape Lindenäs, to the confines of Lapland. From this ridge—of an elevation from 6,000 to 8,000 ft.—the slope is constantly towards the SSW and the SE. A great part of this slope presents planes of various elevation, separated rather by escarpments than by chains. Heddemark in Norway, and Jämtland in S., are levels of the elevation of 3,000 ft. Between these two lofty plains runs a branch of the great Scandinavian chain, which, rising to 5,000 or 6,000 ft., divides Norway from S., and the old Swedish prov. of Dalecarlia from that of Wermeland. In the S this chain receives the appellation of the Seve mountains; in the N it is known by the name of the Kiolen or Kolen. The great lakes of Gottland occupy basins, at the termination of the chains. S. is intersected with numerous marshes, hills, and lakes; and beyond the 60th parallel appear vast tracts of wild and uninhabited land, approximating as we proceed northwards to the sterility and bleak aspect of the polar districts. Nature in various places of this country presents the wildest and most sublime features; but in general the scenery is remarkably uniform. The coasts surrounding the Bothnian gulf and the Baltic are bold and rugged, indented with numerous bays, and stretching out into imposing promontories; while the sea itself is filled with innumerable islands, and rocks or *skares*, which serve as a natural bulwark to the coasts. The shores of Christianstadt, Malmö, and Halland are indeed destitute of these *skares*, but are nevertheless high and well-protected. S. is, in general, a level country; but its flattest tracts derive an interest peculiar to themselves, from the remains of physical revolutions, thus noticed by Mr. Laing:—"The most remarkable feature in this tract of country is the immense number of those blocks or rolled masses of granite, gneiss, and other primary rocks which cover the surface. The whole peninsula, Denmark, and Lower Germany, are strewn over with these erratic blocks, as they are termed by German geologists, and it is difficult to conceive where they have come from, or how they have been transported. Those to the north of the Wener are rounded or rolled, and appear to have been exposed to much friction: but it strikes me those between the Wener and Hielmare are of a different character—the edges and corners are sharp, and they could not have been rubbed and rolled about so much by torrents or the sea, and this difference of character seems to increase, the further east they are found." These blocks vary from the smallest size up to immense masses 200 ft. in circumf. Geologists suppose them to have been carried from their original situation in the northern mountains, and deposited on the Swedish plains by icebergs. In some places, they appear to have undergone the action of water, or to have been swept by violent currents. "The country all from the frontier, or even the Glommen, is as flat as the middle counties of England: the view is only obstructed by gently swelling features of land in a distant horizon. The erratic blocks of

primary rock are not, as more to the north, scattered indiscriminately over the surface, and so profusely that scarcely an acre of land in one sheet is without one or more heaps of them. Here they are collected in long spits or tongues, resting upon large plains which are quite free of and unconnected with them, for the land does not shape into valleys and depressions, nor the waters run according to these elevations upon it. They are upon the face of the country, like gravel upon a table, which a child has swept into long rows and islands. They seldom exceed in elevation 30 or 40 ft. above the level of the ground on which they rest; but the roads must wind round them as if they were mountains, it being impossible to cross them. They are a very singular and inexplicable feature of country. They are evidently very little if at all rolled, or water-worn in these long banks. The corners and edges of by far the greater part of the huge masses of single stones, are sharp and rounded. I could make out no tendency to any one direction in these accumulations; but Swedish geologists consider that they run NW and SE generally. They form many islands in the lakes, as well as heaps on the plains." [Laving.]—The physical geography of Swedish Lapland is noticed in the article LAPLAND. Professor Nilsson states that while the southern part of S. is undergoing a gradual depression, the northern is attaining as gradual an elevation. This is proved by the discovery in the one, of the fossil remains of gigantic and extinct species of animals, together with remains of the human species, and weapons used by the earliest inhabitants, at depths varying from 15 to 20 ft. below the sea-level; and in the other, of shells and remains of marine animals, at elevations varying from 30 to 40 ft. above that level. The views of our own geologist, Mr. Lyell, on this subject are noticed in the following paragraph of this article.

[Seas and coasts.] Sweden is washed by two seas, —the German ocean and the Baltic. The former on the SW, forms between Zealand and Halland the large stormy bay called the Cattegat, and is connected with the Baltic by the Sound, in which lie several islands belonging to Sweden. See articles CATTEGAT and SOUND. The Baltic, besides a number of skæres, contains the two Swedish islands of Gothland and Oeland, and forms in the NW the gulf of Bothnia, at the entrance of which lies the group of the Åland islands. See articles BOTHNIA (GULF OF), and FINLAND (GULF OF). It has long been imagined that the waters of the Baltic, and even the whole Northern ocean, have been gradually sinking: in 1834, Mr. Lyell investigated this subject. On his way to Sweden, he examined the eastern shores of the Danish islands of Moën and Sieland, but neither there nor in Scania could he discover any indication of a recent rising of the land; nor was there any tradition giving support to such a supposition. The first place he visited, where any elevation of land had been suspected, was Calmar, the fortress of which, built, in 1030, appeared to have had its foundations originally below the level of the sea, although they are now situate nearly 2 ft. above the level of the Baltic. At Stockholm, the author found many striking geological proofs of a change in the relative level of the sea and land, since the period when the Baltic has been inhabited by the shells which it now contains. A great abundance of shells of the same species were met with in strata at various heights, from 30 to 90 ft. above the level of the Baltic. In cutting a canal from Södertelje to Lake Maelar, several buried vessels were found, some apparently of great antiquity. At Upsala he met with the usual indications of a former elevation of the

sea, from the presence of shells, which are now common on the shores of the Baltic. Certain plants, as the *Glauca maritima* and the *Triglochin maritimus*, which naturally inhabit salt marshes bordering the sea, flourish in a meadow to the south of Upsala; a fact that corroborates the supposition that the whole of Lake Maelar and the adjoining low lands have, at no very remote period of history, been covered with salt water. Mr. Lyell examined minutely certain marks which had at different times been cut artificially in perpendicular rocks washed by the sea in various places, particularly near Oregrund, Gefle, Lofgrund, and Edskosund; all of which concur in showing that the level of the sea, when compared with the land, has very sensibly sunk. A similar conclusion was deduced from the observations made by the author on the opposite or western side of Sweden, between Uddevåla and Gottenburg, and especially from the indications presented by the islands of Orust, Gulholm, and Marstrand. A general result of Mr. Lyell's investigations is favourable to the hypothesis of a general rise of the land, every tract having in its turn been first a shoal in the sea, and then, for a time, a portion of the shore. The rate of elevation, however, appears to be very different in different places; no trace of such a change is found in the south of Scania. In those places where its amount was ascertained with greatest accuracy, it appears to be about 3 ft. in a century. See article BALTIC.

[Rivers and Lakes.] None of the Swedish rivers have an extensive course. They all run to the S or E from the Lapland and Norwegian mountains. Some of them, rising from great lakes, are of considerable magnitude; but their navigation is impeded by the number of cataracts which distinguish the river-courses in this country. The largest stream seems to be that of the Tornea, which is now the boundary on the side of Russia, and is upwards of 1 m. wide at its mouth. The Lula falls into the NW end of the same gulf, after a course of 250 m. from W to E. There is a fall in this river which is the greatest in Europe, being an uninterrupted perpendicular descent of 40 ft., at a spot where the stream is above a  $\frac{1}{2}$  m. broad. The Kalix, Piteå, and Umeå rivers, discharge themselves into the W side of the same gulf. The most considerable streams in Sweden Proper, are those which flow from lakes, and which are called in the native language *elbs* or *elvs*. Of these the largest are the Göta, the Angermanna, and the Dal. The latter stream is the most important river of S., consisting of two conjunct streams, the Eastern and the Western Dal, which rise in the Norwegian Alps, give name to the old province of Dalarn or Dalecarlia, and fall into the Bothnian gulf, 10 m. to the SE of Gefle, after a course of 260 m. The Angermanna, like all the principal rivers on the E side of the gulf of Bothnia, runs on the mountainous barrier which divides Scandinavia into two parts, and separates Norway from S. It flows through Lapmark, and becoming augmented by streams from the numerous lakes of that province, displays near Weda a noble stream.—Lakes are numerous in S. and of great size. Forsell represents them as covering nearly one-eighth of the total area of the kingdom. The largest is the Wener or Wenon, which is 100 m. long, by 60 m. of medial breadth. It is in great part surrounded with forests and rocks of red granite, and lies 147 ft. above the level of the Cattegat. It is navigable, contains many islands, and receives 24 rivers, the chief of which is the Göta, which has been made navigable by the canal of Trollhatta, executed in 1800.—The Wetter or Western lake equals in length the Wener. It is of great depth, but is of



inferior breadth, nowhere exceeding 25 m. It also has several islands, and receives about 40 small streams. Its only outlet is the Motåla. Its elevation above the neighbouring waters of the Baltic has been estimated at 292 ft.—The Mälär is 60 m. in length, by 18 m. in breadth, and contains a countless number of picturesque islands. Its fine scenery is almost equal to that of Locarno in Italy. Stockholm is situated where this lake joins the sea. It is united with the Hielmar—a lake of 180 sq. m. in area—by the canal of Arboga, opened during the latter end of last cent., with the Bars by the canal of Stromsholm, and with the Baltic by the canal of Sodertelge. The most considerable lake in the N of Sweden, is that of Stor, in Jämtland. The lakes of Lapland are very numerous, and many of them of great extent and elevation. They are generally distinguished by their romantic scenery. For internal communication Sweden has remarkable facilities in her four great lakes, together with many lesser ones, all navigable, as well as her rivers and numerous canals. Of these the canal of Gotha, undertaken to unite the Baltic with the North sea, by means of the lakes in the interior, is the most important. See article GOTHA.

*Climate.*] In a country stretching from the parallel 56° 20' to near 70° N lat., and so diversified in surface, the climate is necessarily various but is upon the whole healthy. In the S it differs but little from that of Scotland. In Gottland, as in the W parts of Scotland, the western gales, loaded with vapour from the Atlantic, frequently deluge the whole country; but in Sweden Proper these are less frequent, from the greater prevalence of E winds. Spring is a rapid and constant alternation of rain, snow, and frost; and of late years this season has been observed to be much more intemperate than usual. The summer is short, but dry and pleasant, the heat seldom exceeding 17° or 18° R. Autumn is the finest season. In winter the Bothnian gulf is frozen from November to March; and travellers can cross over from Finland, by way of the islands of Åland, upon the ice. The E coast has a milder temperature than the western; but the warmest and most pleasant climate is that of Schonen. The climate of Lapland is singular, especially as it affects vegetation. There the temp. of the air is regulated more by the elevation above the level of the sea, and distance from the gulf of Bothnia, than by the mere circumstance of latitude; but in the maritime tract, or Finnmark, which lies between these mountains and the North sea, the heat, except in some sequestered valleys, is almost wholly regulated by the latitude.

*Vegetable kingdom.*] Fruits are by no means plentiful in S.; beyond Gefle, no fruit-trees appear. Farther north, the beech disappears, oaks become scarce, and firs, pines, junipers, and birches, are the only trees which endure the cold. Even these at a higher lat. become stunted; till the dwarf birch, the hardest of all, disappears in the Alpine region of Lapland, a little below the line of perpetual snow. S. is, however, by no means deficient in forests; and excels Norway in the variety, number, and size of leafy trees, particularly in Wermeland, and the S, where are vast forests of oak, beech, elm, and other deciduous trees; but these are still less common than firs and lofty pines. Aspens, limes, pears, and poplars are only found in Schonen. The comparatively low situation of the whole tract to the S and E of the Wener lake, when contrasted with the lofty plains of Norway, is the cause of this superior abundance of leafy trees. The botany of S. has been ably illustrated by the learned Linnæus, the celebrated father of that science. Corn, wheat, rye, oats, barley, pease, potatoes, cabbages, turnips, flax, hemp, hops, and tobacco, are greatly cultivated in S. The fir is the most common tree in this country. The vegetable productions of Lapland are not numerous, but more various than might be expected.

*Animal kingdom.*] Swedish zoology presents nothing remarkable. Beyond the 63d parallel, the common domestic animals of Europe cannot endure the climate, and the physical growth of man him-

self appears checked by the cold. Linnæus enumerates 1,400 species of organized beings in S. The horses, like those of Norway, are generally small, but spirited; those of Angermannland possess most symmetry of limb and form. The sheep have pretty good wool, but the attempts to improve the breed have not succeeded. Towards the 63d parallel, sheep disappear, and their place is supplied by goats. There are in the forests a few stags and roes, besides bears, foxes, lynxes, badgers, and lemmings. The rein-deer constitutes the wealth of the Laplanders. The increase of wolves throughout Sweden and Finland of late years, is one of the most remarkable events in the history of the country. The blue-throated warbler, or *Motacilla Svecica*, is said to surpass the nightingale in the variety, harmony, and sweetness of its modulations and cadences. The ptarmigan is abundant in the northern districts. Several species of wild fowl which haunt the lakes are said to be peculiar to S. The insect kingdom is numerous. Bees are found in the south districts. The plague of the northern districts is the swarms of flies and gadflies, which torment man and beast. The Apollo butterfly is common in the neighbourhood of Upsala.

*Minerals.*] S. may be pronounced the parent-country of modern mineralogy, having produced a number of illustrious names in that science; as Bergman, Cronstedt, Wallerius, Berzelius, and others. First in dignity, though not in profit, are the gold mines of Adelfors, in Smaaland; but these mines are now nearly exhausted, the little they produce scarcely covering the expense. Gold also occasionally presents itself in beds of hornblende, in the mine of Basna in the vicinity of Ryddarhytte. Native gold is also found at Swappavara, in Tornea Lapmark. Silver mines exist in several quarters; but the quantity of this metal furnished by S. is inferior to that produced by Norway. The 4 silver-mines of S., namely that of Gustavus III., and of Loeft in the laen of Stora-Kopparsberg, and of Hellefors and Guldsmid-flytte in Verebro, produced in 1846 silver to the value of £155,770. It is for her mines of copper and iron that S. is chiefly famed. At one time, S. supplied almost the whole world with iron; but English iron, though of inferior quality, is now more universally used. The superiority of the Swedish iron arises from its being prepared with charcoal in place of coal, as well as from the natural quality of the ore, which is a pure protoxide, so nearly in the metallic state as to be highly magnetic with polarity. The greater part of the Sheffield steel is manufactured from it. The chief mines are at Dannemora; and the yearly produce of the principal mines at this place is estimated at £64,000. They were discovered in 1488, and furnish that iron much valued in Britain, and known by the name of *Oregrund iron*, because exported from Oregrund, a port near the junction of the Bothnian gulf and the Baltic sea. The gangue of the ore is a rich calcareous earth, containing very little sulphur, and yielding from 30 to 80, and even 90 per cent. In Wermeland and Nerich, are numerous other iron mines; and the noted mountain of Taberg, in Smaaland, is one entire mass of rich iron ore, and has been worked for upwards of 200 years back. The total number of iron mines is 586, of which 361 are situated in the central part of the kingdom. The chief copper-mines are those of FAHLUN in Dalarn or Dalecarlia: see that article. That of Fahlun is probably the most ancient mine in Europe, having been worked upwards of a thousand years. The mines of Sala and Norberg yield lead and galena; the former pure antimony, and the latter molybdena. Cobalt is found at Basna; but in the richness and profusion of this article, S. is behind Norway; while, on the contrary, it exceeds Norway in the purity of the alum yielded by the works of Andrarum in Schonen. S. is deficient in salt and coal. In Schonen, indeed, a mine of the latter mineral was discovered at the close of the last cent., but nowhere else have indications of it been found. Green sand has also been found in Schonen. At Elfdalen, a village of Dalecarlia, 65 m. NNW of Fahlun, very valuable quarries of porphyry were discovered in 1786, and have been wrought, ever since that period, on the same plan as the marble quarries in Italy.

*Rural industry.*] The surface of S. may be divided into three districts, viz., Northern, Middle, and Southern. The first of these possesses little or no agriculture,—the scanty crop of barley and rye which is reared in it hardly supplying one-half of the consumption. Notwithstanding the alleged deterioration of its climate, S. has made remarkable progress in agriculture within the last thirty years, inasmuch that the produce of its soil is now sufficient not merely for the support of its inhabitants, but

even supplies corn for exportation. This beneficial change has been chiefly effected by the distribution into farms, begun in 1803, of large tracts of crown-land previously lying waste. The extent of meadow-lands indicates the relative extent of pasture-farming to tillage. The surface covered with grain of different kinds, is estimated at 1,832,000 *tunlands*, [a measure about one-sixth greater than the *arpent* in the vicinity of Paris,] and that of meadows, grass-lands, and other crops, is once or twice as great as the corn-fields, according to the different provinces. From 1812 to 1830, the pop. increased 18 per cent., and during the same period the increase in the quantity of corn produced amounted to 42 per cent. It is estimated in S., that  $2\frac{1}{2}$  tons of grain are required for the annual subsistence of each individual; taking the entire produce at 6,600,000 tons for 3,500,000 inhabitants, there would be a very considerable deficiency, which, however, is more than compensated for by the crop of potatoes, amounting to 3,400,000 tons. Rents and wages, except in the richer provinces, are usually paid in kind. The entire soil of S. is divided into 65,265 *hemmans*, each containing about 19 sq. m. Of these 50,000 belong to private individuals; 4,045 are assigned for the support of the army; 359 for the crown and privy purse; 374 for the academies and universities, and 27 for hospitals, and different public establishments. According to M. Daumont the entire number of animals connected with agricultural purposes in S. is 4,720,000; of which there are 400,000 horses, 1,900,000 horned cattle, 1,350,000 sheep, 600,000 pigs, and 170,000 goats. The southern provinces have as many as 243 horses for every 1,000 inhabitants; Nordland diminishes to 90; Bothnia to 30; while in Lapland the breed becomes extinct, and their place is supplied by the reindeer, which, with their dogs, constitute the only domestic animals of those regions. With respect to horned cattle, the average in S. is 680 for every 1,000 inhabitants; in France it is not more than 213. The woodlands of S., extending over 96,000 sq. m., are little better than a desert waste; planting or economy of timber are never thought of; in the more accessible forests, the trees are now small and thinly scattered; while the timber from the northern provinces is rendered quite valueless by the difficulty and expense of carriage. Stockholm and the other towns of S. are so inadequately supplied with wood for fuel, that it has been deemed requisite to prohibit its exportation. The following table exhibits the extent of the woodlands of the chief countries in Europe in relation to their total areas, according to Forsell's estimate:

Sweden has of its entire extent	0.91 covered with wood.
Denmark (the Mainland),	0.02
Danish Islands,	0.12
England,	0.048
Scotland,	0.05
France,	0.09
Prussia, in general,	0.24
Rhenish Prussia,	0.30
Hungary,	0.22
Bohemia,	0.28

Prussia and Bohemia, though more densely peopled than S., export timber to a considerable amount. In 1826, the number of Swedish stills was 172,586, the quantity of spirit produced being 3,583,253 cans [a can is equal to about three quarts]; in 1836 they had fallen to 120,307, and the corn-brandy to 2,555,111 cans; in 1846 to 54,629, producing 1,000,000 cans; and in 1849 the stills had fallen to 51,146. The quantity of corn-brandy actually made, legally and illegally, is calculated at from 25,000,000 to 30,000,000 of cans annually. It is thought that an excise of 4 skillings banco per can on distillery

brandy, and 3 skillings on the home stills, will produce not less than 1,700,000 rix-dollars banco a year, instead of 650,000 as at present. It is to be hoped that this plan will be tried, and that the Swedish peasant will no longer regard the still as the necessary appendage to his farm.

*Manufacturing industry.*] Iron is the principal mineral of S., and constitutes the chief branch of its manufactures. The kingdom of S. is divided into 9 mining jurisdictions, exclusive of Fahlun and Sala, which form particular jurisdictions themselves. These jurisdictions are governed in all matters appertaining to mines by one or more *bergslagor*, or what we would call justices-of-the-mines. About the year 1683, the quantity of iron forged in S., in one year, amounted to 9,690 tons; in 1695, it was 29,760 tons; within the last cent., an increase has taken place in the production of Swedish iron; but not in proportion to the general development of commerce and industry throughout Europe. The annual production of iron amounted between the years

1751—1760 to 328,766 Swedish pounds.
1761—1770 336,850
1771—1780 352,751
1781—1790 408,519
1791—1800 383,346
1801—1810 353,324
1811—1820 353,321
1821—1836 399,121

The production of some years, however, considerably exceeds these averages: thus, in 1802, it was 509,828; in 1815, it amounted to 507,596; and in 1831 to 463,501 Swedish pounds, of which  $7\frac{1}{2}$  make an English ton. The Swedish government has recently conceded to Messrs. Rosenborg and Malam of Hull, civil engineers, the grant in perpetuity of a railroad from the famous Gellivaara iron mines, in Lapland to the port of Tonnefors on the Baltic. The distance is about 100 m. A company is now forming in England and Sweden to carry out the undertaking, for which £450,000 is required.—Tar is another important article of manufacture in this kingdom. It is generally made from the *Pinus silvestris*. Such trees as are stunted, or from situation not adapted for the saw-mill, are peeled of the bark a fathom or two up the stem. This is done by degrees, so that the tree should not decay and dry up at once, but for five or six years should remain in a vegetating state, alive but not growing. The sap thus checked makes the wood richer in tar; and at the end of six years the tree is cut down, and is found converted almost entirely into the substance from which tar is distilled. The roots, rotten stubs, and scorched trunks of the trees felled for clearing land, are all used for making tar. In the burning or distilling, the state of the weather, rain or wind, in packing the kiln, will make a difference of 15 or 20 per cent., in the produce of tar. The labour of transporting the tar out of the forest to the river-side is very great. The barrels containing tar are always very thick and strong, because on the way to market they have often to be committed to the stream to carry them down the rapids and water-falls.—After iron and tar, the other manufactures of S. are almost too inconsiderable to be mentioned. A little alum is exported to the harbours in the S of the Baltic; but the pottery, glass-works, silk-works, woollen manufactures, sugar-refineries, snuff, and tobacco-works, are barely sufficient to meet the home-consumption. In S. as in other poor countries, it is still common for the peasantry to make at home the clothing and utensils required for their family use.—The manufactories of S. were, in 1824, only 1,177 in number, and employed but 8,156 workmen. The value of their man-



ufactured produce was about £900,000. In 1831, the number of manufactories was 1,884; that of the persons employed in them, 12,143. The value of their productions was about £1,200,000. In 1840, the number of manufactories was 2,176, employing 15,410 hands. According to the annual statistical report of the Swedish College of Commerce, the number of factories and manufacturing establishments in S., at the close of 1850, was 2,513, employing 23,427 workpeople, and producing goods valued at 24,287,964 rix-dollars, or about £2,250,000. The principal branches of Swedish manufacture in 1850 were as follows:—

**Cloth Factories.**—These amounted to 160, with 1,015 looms and 4,932 labourers. Number of ells made, including cloth and all kinds of woollen goods, such as corduroy, kerseymere, &c., 1,378,157, besides 9,854 shawls and blankets, &c., the whole valued at 6,917,857 rdr. The greater part of these articles were produced in Norrköping, which has 122 cloth works, many of them very considerable establishments. The condition of the Swedish cloth manufactures exhibits the consequences of protection. In 1852, the number of such works had fallen to 130, with 752 looms and 3,509 workmen; meantime smuggling is more active than ever.

**Cotton and Linen Factories.**—There were 29, employing 988 labourers, and producing 2,318,467 ells of cotton cloth, calico, shirting, cambric, &c., and 81,699 table-cloths, &c., the whole valued at 697,702 rdr. The greater part of the ell-goods were made at the mechanical cotton works at Rydholm, in Elfsborg district.

**Cotton Mills.**—These were 12 in number, with 2,131 workpeople, producing 5,734,332 Swedish pounds of yarn, mostly under No. 26, and valued at 3,199,900 rdr. The largest mill belongs to a company in Gottenburg.

**Sail and Tent Cloth Manufactories.**—There were 15 of these mills, employing 1,256 work-people, and producing 824,559 ells, at 404,106 rdr. Two-thirds of the whole were produced at the factory of Messrs. Gibson, at Jönseröd, near Gottenburg.

**Silk Manufactories.**—These amounted to 18, all in Stockholm, and employed 845 hands. They produced, in 1850, silk and half-silk goods, amounting to 216,844 ells, and 223,045 shawls and handkerchiefs, the whole valued at 968,103 rdr.

**Cotton-print Factories.**—These were 17 in number. They printed 111,900 ells of cotton and furniture stuffs, together with 198,016 shawls and cloths, the whole valued at 88,221 rdr.

**Dye-houses.**—The amount of wages during the year in these establishments, 426 in number, was 657,452 rdr.

**Sugar Refineries.**—These 19 establishments produced 13,494,009 Swedish pounds of sugar, and 6,171,956 pounds of molasses, the whole valued at 4,624,601 rdr.

**Tobacco and Snuff Mills.**—There were 86, which produced 1,745,924 Swedish pounds of tobacco, including 155,606 pounds of cigars, and 2,558,960 pounds of snuff, the whole valued at 1,420,320 rdr.

**Tanneries.**—These works, 548 in number, produced 1,806,762 Swedish pounds of leather, and 296,443 skins, valued at 1,069,701 rdr.

**Glass Works.**—These were 16 in number, and produced 8,701 crates of window-glass, valued at 339,584 rdr., and other glass goods, valued at 674,958 rdr.

**Paper Mills.**—There were 92 of these. They produced 221,845 reams, 13,512 lipounds, 1,106 bundles, and 1,096 rolls of various kinds of paper, besides the paper for the bank-notes, &c., made at Tambr mills, near Stockholm. The whole value was 763,866 rdr.

**Oil Mills.**—Sixty oil mills produced 353,162 cans of linseed and rape oil, together with 8,967 skeppunds of oil-cake, the whole valued at 506,832 rdr. More than half the above was produced at a mill at Stockholm.

**Porcelain Manufactories.**—There were only two of these, Rors-trand in Stockholm, and Gustafsberg near the same. Their produce amounted to 305,000 rdr.

**Soap-Boiling Works.**—13 in number. Their produce was 18,895 quarter casks, valued at 136,817 rdr.

**Mechanical Shops.**—There are 21 producing machines, &c., valued at 454,810 rix dollars. Besides these, the Motala factory produced for the sum of 439,688 rdr.

**Porter Brewery.**—Carnegie and Co.'s brewery in Gottenburg, the only establishment of the kind in S., manufactured 906 hog-heads, and 600,000 whole and half bottles, the whole valued at 127,950 rdr.

The total taxes to the Crown paid for the privilege of these works was 46,443 rdr.

**Home Weaving.**—produced in the district of—

Elfsborg,	7,264,151 ells, cotton stuffs
"	412,852 " linen
"	588,057 " woollen "
"	1,448,928 handkerchiefs, &c.
Gefleborg,	2,165,000 ells, coarse linen
West Norrland,	357,000 " linen
Halland,	246,950 " woollen and linen.

The number of master tradesmen in the towns was 7,685, employing 6,865 journeymen, 8,763 apprentices, and 1,712 other

workpeople; master tradesmen in the country 1,659, with 323 journeymen, 628 apprentices, and 382 other workpeople. Besides these, there were 10,205 parish artisans, with 5,697 journey men and other assistants.

**Commerce.]** S., lying between two seas, is favourably situated for commerce, and the Swedes are active and enterprising sailors, yet the commerce of S. is in a low state. The roads are good, but internal commerce is much impeded by the distance between the manufacturing towns. In 1816, the amount of imports was treble that of exports, so that ready money nearly disappeared from circulation. This occasioned a rigorous prohibition of almost every article of foreign produce; but the new system entirely failed in producing the beneficial effects expected to flow from it. The merchants of Sweden, in 1831, were 3,080 in number; with clerks, apprentices, &c. amounting to 3,158 persons. The imports of the kingdom amounted

In 1825 to 1831	13,587,138 rix-dollars.	The exports to 12	228,382
1826	14,836,115	"	10,275,961
1827	14,294,542	"	12,186,909
1828	15,085,273	"	12,892,598
1829	17,001,636	"	11,310,947
1830	15,484,763	"	11,344,992
1831	12,302,682	"	13,564,618
1840	18,308,000	"	20,434,000

According to official returns it appears, on the average of three years ending 1846, that the total annual value of imports was 20,103,333 Swedish dollars banco; and the exports 23,646,667 d., making a total of 43,750,000 d., or about £3,600,000. The unimportant position that S. holds comparatively with other European commercial nations is ascribed to the attempt to foster native industry and manufactures by imposing high and unreasonable duties on foreign products and fabrics, thereby sacrificing an important and lucrative foreign trade, and preventing S. from availing herself of her highly favourable maritime situation, as well as many other natural resources, which a more enlightened policy would develop to the great advantage of the country and the revenue.

The following outline of the value in rix-dollars banco of the commerce of S. during 1850, is derived from official tables:—

	Imports.	Exports.
Norway,	2,317,000	778,000
Finland,	422,000	691,000
Russia,	1,698,000	272,000
Denmark,	1,733,000	3,673,000
Prussia,	451,000	1,374,000
Mecklenburg,	51,000	452,000
Lubeck,	4,083,000	1,313,000
Hamburg,	647,000	111,000
Bremen,	243,000	186,000
Hanover and Oldenburg,	1,000	89,000
Netherlands,	561,000	468,000
Belgium,	74,000	266,000
Great Britain and Ireland,	3,332,000	7,741,000
France,	479,000	2,074,000
Spain,	245,000	342,000
Portugal,	153,000	839,000
Gibraltar and Malta,	—	52,000
Italy,	152,000	248,000
Austria,	—	82,000
Egypt,	—	11,000
Algiers,	—	298,000
Rest of North Africa,	—	5,000
United States,	1,639,000	2,518,000
West Indies,	161,000	—
Brazil,	4,330,000	299,000
Plata States, Rest of North and South America,	—	31,000
Cape of Good Hope,	—	131,000
East Indies and Australia,	1,215,000	211,000
Total,	23,987,000	24,505,000

The import of coffee was, in 1841, 5,300,000 lbs.; in 1850, it was about 8,000,000 lbs. Raw sugar was imported in 1841 in the quantity of 14,500,000 lbs.; in 1850, it reached 25,000,000 lbs. Arrac.

rum, and cognac in 1846, 290,000 cans; in 1850, 390,000 cans. During 1851 the total imports amounted to 28,048,000 rix-dollars banco, of which 548,000 consisted of bullion and money. The total export was 164,900 in coin, &c., and 26,794,000 rix-dollars banco in goods. A large portion of this increased commercial activity is a direct consequence of the English free-trade system, which has conferred inestimable benefits on S., without any attempt on its part hitherto to make the slightest concession to English interests, or to take any step savouring ever so little of the hateful word "reciprocity." The free-trade party in Sweden is, however, daily increasing in influence, and must shortly succeed in compelling considerable advances in the right direction. The principal increase in the exports for 1851 was in the article of timber. Not less than 815,533 dozen of deals and planks were sent out of the country in that year, while 238,240 dozen formed the entire export in 1831. The export of other kinds of timber has increased in the same proportion. Bar-iron was exported in 1851 to the amount of 580,541 skeppunds; exceeding all previous years except 1847, when it was 604,501 skeppunds. The Swedish commerce with Great Britain was in 1851, 14,543,000 rix-dollars banco, in export and import, or more than one-fourth of the whole foreign trade of the country. The greater part of this sum was export, which amounted to 10,344,000 rd., the import from Great Britain being only 4,199,000 rd. This fact speaks volumes. We took Swedish produce, especially timber and iron, to the value of nearly £950,000; Sweden took our goods to the value of only £350,000.

*Commercial tonnage.*] The commercial tonnage likewise increased last year very considerably, but it has principally shown itself in foreign vessels, especially Norwegian. The commercial fleet consisted, in 1840, of 2,171 vessels = 175,558 tons; in 1850, of 2,744 vessels = 225,966 tons. The merchant-fleet of Stockholm decreases annually, while that of Gottenburg and Gefle increases rapidly. In 1850, 841 vessels were engaged in foreign trade, with a burthen of 141,746 tons; their crews amounted to 1,283 officers, and 8,050 men, an increase since 1840, of 283 officers, and 1,106 men. The navigation act was used in Sweden in 1850 by 7 English ships, of 2,522 tons; in England, by 112 Swedish vessels, of 26,032 tons. The commercial marine of Sweden in 1816, amounted to 1,036 ships carrying 65,632 lasts; and that of Norway to 1,514 ships carrying 65,884 lasts. In 1837, the Swedish commercial shipping amounted to 924 vessels, carrying 118,125 tons.

*Monies.*] Payments are made in dollars, skillings, and stivers; but in S. and Norway the value of the two latter coins is very different. In Norway a skilling is the lowest coin, and answers to our halfpenny; a stiver is equal to a penny. In S. skillings answer to our pence; and stivers to our farthings. All small sums are reckoned in stivers; instead of saying, e. g. 4 skillings, they would say, 16 stivers. There are two kinds of dollars in use, the rix-dollar banco, and the rigs-geld dollar. Both are divided into 48 skillings; but the rigs-geld d. is 33½ per cent. depreciated, i. e. 2 dollars banco are equal to 3 rigs-dollars. A silver rix-dollar banco is equal to 4s. 10d. English currency; and the rix-dollar note, 1s. 8d. The only gold coin is the ducat, which is equal to 2 rix-dollars.

*Measures.*] The Swedish foot is equal to 0.974 English ft.; the Swedish ell, which is divided into 2 feet, or 4 inches, is equal to ¾ of an English ell. The Swedish mile comprehends 18,000 ells, or 36,000 English ft. nearly, being 10½ to a degree. The

Swedish sq. m. is equal to 44 English sq. m. The Swedish pound is equal to 2½ English cwts.

*Railways.*] The Royal Swedish railway, forming a part of a grand trunk-line from Stockholm to Gottenburg, is now being executed between Oerebro and Hult. It has a government guarantee of 3 per cent., of which 1 per cent. is to be appropriated for a sinking fund. The present mode of conveyance is by canal and lake from Gottenburg to Hult, at which point the railway will commence and run on to the town of Koping, where it will be in connexion with steamers to Stockholm. The portion of the line now commenced will connect the three great lakes of Sweden, on which a large amount of traffic is now carried on. "The establishment of railroads in this country," says the Swedish diet, "may be considered as an inevitable condition for the possibility of making profitable a considerable variety of the natural productions of S., which in consequence of their low value in proportion to their bulk, cannot sustain the heavy charges which the present means of transport impose, and the sequel of which has been that various of the produce and manufactures of the country have had their prices so advanced through heavy freight charges that their sale has been impeded, and the fair profit expected by the produce curtailed. By extending the railroad between Oerebro and Hult, as far as Koping, a connexion would be effected between the most considerable inland lakes of the country, Wenern and Malarn, and a more rapid communication established between the two largest cities in the kingdom, Stockholm and Gottenburg, besides which this railway may would then extend partly through two fertile corn-producing provinces, partly also through or in the vicinity of the principal mining-districts of the kingdom." The government have proposed that for the future the state alone shall construct the great trunk lines; that the necessary funds shall be raised by state-grants, or by state-loans guaranteed by the state and managed by the exchequer; that this shall only be done in proportion as the finances can bear the sums required for interest and gradual payment; that the government shall procure exact details, plans, &c., of the lines required, and shall be empowered to employ 20,000 rix-dollars banco yearly, for three years, beginning with 1855, for this purpose; that 615,000 d. shall be taken from the brandy-tax income in 1855 or 1856 towards the great Stockholm-Gottenburg railway line, and so on in succeeding years; and that branch-lines may be executed by individuals; but only with the approval of the Crown as to every detail, whether the state assist them or not.

The trunk lines proposed by the government are—

1. Stockholm-Gottenburg (the K�ping-Hult section not included),	13,666,666 rix-d. b.
2. Stockholm-Malm�,	21,333,333
3. Line to Norway, and thence to Gefle,	12,333,333
Total,	47,333,332

These lines amount to a united length of 142 Swedish miles. The plan has many good points, but throws everything into the hands of the Crown, as usual in Sweden.

*Population.*] The pop. of S., without including Finland, was, in 1751, 1,785,000. After the census of 1830, it was 2,871,252, giving an increase of 1,086,000 in a space of 80 years. From 1805 to 1810 there was an actual diminution of about 35,000 annually, owing to the destructive wars of Gustavus IV. and the calamitous events by which they were followed; but from these the country soon recovered, and the returns for ten years, from 1820 to 1830, showed it to be in a more prosperous and flourishing state than for any similar period during the last cent. In 1840, the pop. was 3,138,884; in 1845, 3,316,902; in 1850, 3,482,541. In its mode of distribution, this pop. shows a gradual decrease as we advance north. The laen of Malm , the most southerly of the kingdom, is the densest in pop. The average density is about 108 to the English sq. m. for the southern provs., and not more than 20 for the whole kingdom. The manner in which this pop. is distributed between town and country, bespeaks an agricultural, more than a manufacturing or commercial people. "In France," says M. Daumont, "the cities and towns contain one third of the entire pop.; in England one half; and in both these countries the proportion has been constantly on the increase for the last 50 years, thus bespeaking a corresponding advance in trade and manufacture; but in S. the entire number of towns, even including Borgholm, with its 20 houses and 100 inhabitants, does not exceed 86, and their inhabitants in 1830 amounted to 280,269, as nearly as possible a tenth of the whole



pop. It would also appear that this proportion has not been on the increase. The following table presents the area in Swedish sq. m., and pop. in 1840 and 1850, of the different *laens* or provinces:—

	Area.	Pop. in 1840.	Pop. in 1850.
1. City of Stockholm,		84,161	93,070
2. Malmoe laen,	405	221,670	253,084
3. Christianstadt laen,	553	165,880	189,627
4. Halmstads,	432	94,984	105,726
5. Carlsrona,	258	95,807	107,827
6. Wexloe,	861	121,454	136,623
7. Joenkoopings,	976	150,477	163,426
8. Calmar,	968	184,557	202,178
9. Linkoeplings,	967	206,625	222,484
10. Mariestads,	754	181,048	199,897
11. Wenersborgs,	1145	218,618	246,136
12. Goeteborgs,	433	164,974	187,583
13. Wisby,	279	41,575	44,572
14. Stockholm,	662	110,279	114,643
15. Upsala,	475	85,294	89,323
16. Westeraes,	605	92,494	96,601
17. Nykoeplings,	57	114,920	120,113
18. Oereflo,	742	125,061	136,660
19. Carlstads,	1879	195,546	221,886
20. Fallin,	2787	138,141	151,497
21. Gefleborgs,	1719	100,794	120,158
22. Hernoesands,	216	85,875	99,558
23. Oestersunds,	435	45,769	52,271
24. Umea,	668	57,104	70,758
25. Pitea,	751	46,767	55,751
The lakes,	81		
	3868	3,138,884	3,482,541

S. is inhabited by three nations, viz., Swedes, Finns, and Lapps.—The Swedes, who form the majority of the inhabitants, are the descendants of a Germano-Celtic tribe, related to the Normans and Danes, but divided into three other tribes, viz. Swedes, Eastgoths, and Westgoths. Their language is a Germano-Gothic dialect, which bears considerable resemblance to the Danish and Norwegian. They are a well-made, hardy race of men. Their complexion is generally fair, with auburn hair and blue eyes. The Swede usually exhibits a more than ordinary degree of earnestness in manner; his conception is lively, and judgment keen; he is prompt to conceive, and resolute in executing his designs; hospitable, and a lover of society, yet simple in his habits of life. At the same time, "it is a singular and embarrassing fact," to use the language of Mr. Laing, "that the Swedish nation, isolated from the mass of the European people, and almost entirely agricultural or pastoral, having schools and universities in a fair proportion, and a powerful and complete church-establishment, undisturbed in its labours by sect or schism, is, notwithstanding, in a more demoralized state than any nation in Europe,—more demoralized even than any equal portion of the dense manufacturing pop. of Great Britain." It appears, that in 1835—the total pop. of S. being a little less than 3,000,000—one in every 140 persons was convicted of some criminal offence. In England and Wales in 1831, the criminal convictions were one in every 1,005. In Ireland, the criminal convictions in 1834 were one in every 723 of the pop. "Ireland," says Mr. Laing, "though turbulent, and addicted to brawls, is, compared with Sweden, a pure and virtuous country." Mr. Laing thus endeavours to account for these facts, "The main cause," he says, "I conceive to be a radical defect in the construction of society in this country. The weight of public opinion upon the side of morality, and acting as a check upon private conduct, is lost in it by the too great proportion and preponderance in the social body of privileged classes,—of persons, whose living, well-being, distinction, social influence, or other objects of human desire, are attained by other means than public estimation gained by moral worth. The privileged classes in this community are not merely the hereditary aristocracy, the military,

and members of the learned professions; but the tailor, the shoemaker, the smith, the joiner, the merchant, the shopkeeper,—in short, every man exercising any craft, trade, branch of industry, or means of living,—that is to say, the whole of the upper and middle classes, down to the mere labourer in husbandry,—belong to a privileged or licensed class or corporation, of which every member is by law entitled to be secured and protected within his own locality, from such competition or interference of others in the same calling as would injure his means of living. It is, consequently, not as with us, upon his industry, ability, character, and moral worth, that the employment and daily bread of the tradesman, and the social influence and consideration of the individual, in every rank, even the highest, almost entirely depends; it is here, in the middle and lower classes, upon corporate rights and privileges, or upon license obtained from government; and in the higher, upon birth and court, or government favour. Public estimation, gained by character and conduct in the several relations of life, is not a necessary element in the social condition, even of the working tradesman. Akin to this cause is the injudicious meddling of government with its encouragements, rewards, and distinctions, in those matters which do not belong to the judgment of governments, but to the moral feelings, common sense, or private interests, of individuals." In 1849, the Swedish government enacted certain laws against drunkenness, which show the degree to which that disgusting vice had attained. For the first offence a fine of 15 rix-dollars is imposed; for the second, 30 d.; for the third or fourth, the elective franchise and the privilege of being elected a member of parliament are forfeited; and the offender is moreover exposed in the pillory on the following Sunday in front of the parish church. For the fifth offence the culprit is immured in a house of correction for one year. A person convicted of having induced another to drink to excess pays 15 d., and 30 d. if the victim be a minor. Another recent ordinance strikes at the root of some of these evils denounced by Mr. Laing, by enacting that (1.) all persons are free to follow any branch of trade or commerce they may think fit, the same not being prohibited by the laws. (2.) That any individual may establish workshops and keep workmen without having himself previously served as an apprentice to the trade, but before placing himself at the head of a manufactory he must give proofs of his aptitude before a commission appointed by the minister of commerce. (3.) That all trade societies (corporations) such as those of the grocers, the bonnet-makers, the clothiers, &c., are and remain abolished, and every one is free to follow every branch of trade that he likes.—The pop. of S. has only 3 mendicants in every 100 persons; while in Norway they reckon 5 out of every 100; in Denmark 4; in Wurtemberg, 5; in Switzerland, 10; in Italy, 13; in France, 15; and in the British islands collectively, 17. Every parish in Sweden is by law compelled to maintain its own poor. The funds for this purpose are furnished by voluntary contributions, legacies, donations, the produce of fines, and a property-tax. M. de Hartmansdorf, secretary of state for ecclesiastical affairs, estimated in 1829 the number of individuals in receipt of relief at 63,348 among a pop. of 2,780,132, which gives a proportion of 1 to 42. The provisions of the law against those who, being able to work, obtain assistance by fraudulent means, are very severe. The wages of artisans are about 10d. a-day, and of skilful agricultural labourers 7d. a-day; while the less skilful of the latter are receiving as little as 4d. or 5d. In the southern provs.

the agricultural classes live upon salt fish and potatoes; in the north, porridge and rye-bread form the principal food. Now and then the artisans taste meat. To make amends, however, for such poor fare, the Swede drinks frequently and lustily, though his beverage is often peppered brandy and peppered rum, if the terms can be applied to liquors which can boast of small connexion with grape or sugarcane. Wheat flour is little known. Mr. Liddel, the English Consul at Gottenburg, has estimated the annual domestic expenditure of a peasant farmer at £10 15s. 4d. In the families of the labourers, about two-thirds of this sum would cover the expenditure. Everybody is well clad, for in their manufacturing like their farming, the Swedes work for their own actual consumption in the first place, the surplus is a secondary object; and from the number of little nick-nacks in their households, such as good tables and chairs, window-curtains and blinds, clocks, fine bedding, papered rooms, and a few books, it is evident that they pretty generally lay out their winnings on their comforts.

*Finns.*] The Finns, who once composed the second branch of the Swedish pop., and had spread over all Finland, are now found only as colonists in the Lapmarks, and Hernösand. They have dark coarse hair, sallow countenances, eyes extended lengthwise and half-closed, sharp chins, and elevated cheek-bones. "They are," says Dr. Clarke, "to the Swedes and Lapps, what the Irish are to the English and Scotch; that is to say, a nation in which the extremities of virtue and vice are singularly blended; haughty, impetuous, and arrogant, in prosperity; abject and spiritless in adversity; in all things given to excess, whether on the brighter or on the darker side."

*Lapps.*] The Lapps, inhabiting the Lapmarks, are related to the Finns, and speak a peculiar Finnish dialect. In 1805, there were only 5,444 Lapps in the Swedish kingdom, of whom about 1,100 have subsequently come under the government of Russia. "Both the Lapland and Finnish languages," says Dr. Clarke, "are pleasing to the ear, and admirably suited to poetry, owing to their plenitude of vowels. They constantly reminded us of the Italian; and we might cite several instances of words common to all the three. Acerbi, as an Italian, sometimes understood the expressions used by the natives of Finland. 'Nothing' can be softer or more harmonious, than the sounds uttered by a Finland peasant, when reciting his Pater Noster. It is full of labials, nasals, open vowels, and diphthongs, and is destitute even of a single guttural."

*Religious establishment.*] The Swedes have long been accounted among the most vigorous supporters of the reformed faith, having adopted it with almost complete unanimity under Gustavus Vasa, and having subsequently made the most signal exertions for its maintenance in Germany. That form of it designated Lutheranism has been adopted as the national creed. "In no country in Europe," says Mr. Laing, "is the church establishment so powerful and perfect. In S. there is not merely a union of church and state—the church is a distinct component portion of the state, equal in its constitutional share in the legislature, to the whole body of the aristocracy, or of the representatives of the people; and possessing extensive authority and influence—besides its share in the legislature—through the department of government for church-affairs. It has but one religion, its own, to deal with in the nation, there being no Catholics or Calvinists among the Swedes; and is undisturbed by sectarianism, or dissent of any note, from its doctrines or forms. Its members, as a body, are highly educated, of unde-

niable piety and zeal, with very efficient internal regulations in their establishment, for preventing negligence or laxity in the discharge of clerical duties, or the admission of incompetent individuals to clerical functions. The exemplary church attendance of the people, the erection of new, and decoration of old churches by voluntary contributions, and the free-will-offerings at Easter and Christmas to their pastors, prove beyond question the popularity and influence of the established clergy in S., and the good feeling in general of their flocks towards them." A recent writer in the *Morning Chronicle*, whose tendencies towards a party struggling for domination in his own church are sufficiently obvious, states that considerable agitation now pervades the church in S., but laments that "the tendencies of the present reform movement in the Swedish Church are Presbyterian and sectarian. Three hundred years of church and state degradation," this writer goes on to say, "have done their work. The bishops and chief dignitaries are hated, as being mere adventurers and Court tools. Church forms and principles, which have been so long used as means of corruption and oppression, are now regarded as in themselves corrupt and oppressive. The peril of heresy and schism is ignored. The fact that a 'bishop' is not necessarily more despotic, or wealthy, or supercilious, or idle than a 'superintendent,' or a 'moderator,' or a 'visitor,' is forgotten. The Free kirk is at a discount in Scotland; Sweden takes it up with applause. The 'Evangelical Alliance,' that motley assemblage of hotly debating sects, united by no creed but that of 'agreeing to differ,' and a horror of Popery, which would be good if it led them to eschew schism and to join the holy Catholic church, is smouldering in its own smoke in London: Sweden regards it as a great and shining light and forms an auxiliary society! All this is very melancholy," adds this writer, and he concludes his exposition of the melancholy condition of the Swedish church by exhorting it to seek in its own free synods to have the temporalities of its bishops adjusted, and all abuses rectified; instead of coquetting with 'Evangelical alliances,' to shun all schisms and corruptions of the faith, seek after unity and peace, and a more Catholic ritual, and finally, as a sure and certain remedy of all evils, to "enter once more into communion with the great Apostolical churches of England, America, and the East." Emanuel Swedenborg, famous for visions and mystical reveries, was a native of S., and has still a considerable number of followers.

*Literature.*] The introduction of Christianity into S., about the middle of the 12th cent., mitigated the fierce and roving spirit of the descendants of the Asae; and the union of Calmar gave peace and stability to the three Scandinavian states; but the songs and traditions of the ancient Scalds were allowed to perish from the national poetry of Sweden; and the old classical language, as well as the magnificent mythology of the North, found their last asylum in Iceland. Gustavus III., himself a distinguished writer, was indefatigable in his endeavours to encourage and reward genius of every kind. He enriched his country with several valuable libraries, the fruits of his numerous warlike expeditions, and liberally patronized the two universities of Upsala and Lund. About the 14th cent., S. seems to have had some histories, or rather chronicles; but it was not till the 18th cent. that men appeared in this country whose learned labours have rendered them deservedly illustrious in every part of the world. It must be allowed that S. is by no means favourably situated for the cultivation of literature. For learned men can address themselves



only to a very limited portion of the community, and it seldom happens that the sale of a book is considerable enough to defray the expenses of publication, and least of all in scientific works. To these difficulties we may add, that a very serious obstacle to the diffusion of a literary spirit, arises from the want of regular mails and conveyances. In 1816, there were only 32 booksellers' shops in S., and only 177 works published, 90 of which were originals, and the rest translations. In Stockholm were 9 newspapers and other journals; in Gottenburg 6; and in the rest of S. 20; a proportion equal to about one-fourteenth of the literature of the public press in Germany. The year 1818 was, however, more productive, the total number of books printed that year amounting to 362, of which 91 were translations; but it may be mentioned as a proof of the reward which literary merit is likely to meet with in S., that the total sum paid for copy-right in that year amounted only to 372 dollars. The present scale of literary activity in S. may be judged of by the following list: of works published in 1850:—Theological 182; belles-lettres, 156; politico-economical, 156; judicial, 123; miscellaneous, 103; historical, 80; economics and technology, 55; instruction, 45; philological, 40; medical, 38; mathematical, 31; physical, 22; geographical, 18; military, 5; fine arts, 3; philosophy, 3; total, 1,060 works. The greatest mass have been works of a religious class, and the next greatest a flood of romances and novels, original and translated.—The university of Upsala was founded in 1471. In its constitution and mode of education, it partakes partly of the Scottish and partly of the English university system: the resemblance to the former, however, is much more close than to the latter. At the head is a chancellor, who must always be a person previously important by birth and office, proposed by the professors, and approved by the king. The number of professors is 22. Their salary is not less than £20, but never exceeds £100, to which may be added a small sum annually received from such students as attend private lectures. The students lodge in the town, and resort to the university only for the purpose of hearing lectures. To preserve order, they are divided into tribes or nations, according to the different provinces to which they belong. Each tribe has an inspector and two curators, and the ordinary members are divided into seniors and juniors, of whom the former are, in some degree, intrusted with the care of the latter. The university of Upsala has, to use the English phrase, two annual terms, one commencing in February, the other in October; but a great part of the year is consumed in holidays. The university library contains upwards of 40,000 volumes, and many manuscripts.—Lund, or, as it is sometimes called, Lunden, one of the most ancient cities of S., is the seat of another university, established by Charles XI. in 1666. It has 15 professors, with about 45 inferior teachers and assistants, and at present about 400 students. The library contains 30,000 volumes. It has, besides, a botanical garden, an anatomical theatre, an observatory, laboratory, and a cabinet of curiosities.—S. has several literary societies; of which the principal is the Swedish academy-of-arts and sciences at Stockholm, and the royal society of Upsala. The academy was in 1821 divided into 9 classes, viz. pure mathematics, practical mathematics, physics, chemistry, and mineralogy, zoology, and botany, medicine, and surgery, political economy, and belles lettres. The number of acting members, who are employed in these departments, are collectively about 120. Queen Ulrica Eleonora founded the royal academy of belles lettres in 1753,

which has also given birth to a long series of printed transactions; and Gustavus III., in 1786, established the celebrated 'College of the Eighteen' for the improvement of the national language, poetry, and eloquence. The royal society of Upsala was instituted in 1720, and is said to be the most ancient society of that kind in the north of Europe.

*Schools.* Of elementary schools, the number in S. is by no means inconsiderable; education, at least the primary or fundamental part, being, as in Scotland and Switzerland, generally diffused. Government disburses, for the universities and schools of every description, in the shape of salaries, allowances to the poorer students, purchase of books, &c. about £60,000 annually. In 1850, the number of children educated in fixed schools was 146,526; in 1853, it was 152,039. The number in the ambulatory schools was, in 1850, about 126,000; in 1853, about 132,000. In the public gymnasia were educated, in 1850, the number of 6,228 children; in 1853, 6,292. In private schools, 17,465 children were taught in 1850, to 17,856 in 1853. In 1850, 128,996 were educated at home, to 136,736 in 1853. In 1850, about 14,280 children were left untaught; and in 1853, only 9,669. Private teaching is as currently adopted among the middling and higher classes in Sweden as in France. From the elementary or parish schools, which are very thinly scattered in the north, boys are removed to more dignified seminaries, or *gymnasias*, of which the kingdom contains 12, being one in each bishopric, and where they are instructed in the Latin, Greek, and Hebrew languages, and in other departments of learning. Thence, if they are destined for literary pursuits, or for any of the learned professions, they proceed to the university. An attempt has been made to introduce the Lancasterian system into S.; and Sunday and free schools exist in many of the principal towns. There are two schools for navigation in Stockholm and Carlserona; a military academy at Carlsberg; and several other particular institutions.

*Government.* The constitution of the 7th June, 1809, and the order of succession declared on the 18th of December in the same year, by which all the laws promulgated since the death of Charles XII. were abolished, are now the fundamental laws of the Swedish kingdom. The act of union of the two kingdoms of S. and Norway may also be considered as a fundamental law. By the new constitution, S. was declared to be a limited hereditary kingdom, at the head of which stands the king, with extensive but defined prerogatives, and in which the States have an important voice. Norway is considered as a distinct kingdom, united under the same crown with S. Perhaps, notwithstanding the apparent independence of the king, S. is at this moment one of the most truly limited monarchies in Europe. The king can only enter into treaties and alliances with foreign powers, after having communicated with the minister-of-state and chancellor. An extraordinary council-of-state must be convened and consulted before the king can constitutionally declare war or peace; but he may, after taking this step, act upon his own responsibility. The king is at the head of the army and navy; but can only transact the business of this department in presence of inferior officers, who are authorized to advise him. He can make no encroachment on the personal liberty or the property of his subject, without a formal intervention of the law; he is also bound to protect his subjects in the free exercise of religion, in so far as not disturbing the public peace. The last appeal lies to the king; he can soften the rigour of the law, and return lands and goods forfeited to the crown. Foreigners are only eligible to

a few military offices; civil offices are exclusively filled by native Protestant Swedes. The king names one of three candidates proposed to him, to the bishoprics and archbishoprics. The higher and lower judges can only be dismissed by a regular trial. The king has the power of creating nobles, restricting the title to the eldest son and heir. All royal ordinances must be signed by the speaker of the council, who, if he should conceive the will of the king opposed to the constitution, is authorized to report the same to the council-of-state, and resign his office until the States have examined into the matter, and approved of his conduct. The succession is hereditary in the dynasty of Bernadotte; it runs in the male line, according to primogeniture, to the exclusion of female descendants. In the event of the failure or forfeiture of the royal line, the States have the power of nominating a successor to the Crown. The king is of age at 20; and must be of the pure Augsburg confession as adopted by the assembly at Upsala in 1593. In case of minority, the council-of-state assumes the regency. The title of the king is 'N. N. by the grace of God, king of Sweden, Norway, the Goths, Wendes, &c.' The royal arms consist of three golden fields—in an azure field for Sweden; a red lion, in a golden field, for the kingdom of the Goths; and a golden lion, with a silver halbert, on a red field, for Norway.

*The Diet.*] The diet, which bears a resemblance to the British parliament, consists of four orders, which maintain their separate existence as independent members of the legislature, viz.: the nobles, the clergy, the peasants, and the burghers. The nobles are by far too numerous for so thinly peopled a country,—a title of nobility conferring rank on a whole family, the head of which has a seat in the diet as its representative as soon as he has reached the age of 24. The clergy are represented by the archbishop of Upsala, the 12 bishops of the kingdom, 50 deputies from the inferior clergy, among whom the teachers of the public schools are included, and four from the universities; the peasants are represented by about 120 delegates from that body; and the burghers by deputies from the 66 royal free towns, Stockholm sending 10 deputies, Gottenburg and several others 3, and the smaller towns one deputy, besides 6 from the mining-districts. To be eligible as a representative of the peasantry, it is necessary to belong to a family permanently employed in agriculture, and either to hold land from the Crown during life, or to possess a portion of land in perpetuity. The expenses of the deputies of the clergy, the peasantry, and the towns, are all defrayed by their constituents; and it is optional with each *haerad* or district, and every town, to depute its special representative, or to join with one or more towns, and choose a representative for them all. According to Mr. Laing, the house-of-nobility in the diet before that of 1840 consisted of 492 members, of whom 17 were independent of the executive in their circumstances and position in society: the house-of-clergy consisted of 57 members, all in office, and depending for advancement or family advantage upon court favour: the house-of-burgesses consisted of 47 members, of whom 15 were burgo-masters appointed by the crown, 10 were counselors, and 4 counsellors of commerce, all more or less connected officially with the crown; the house-of-peasants consisted of 122 members. Of the whole diet, consisting of 718 members in all, 164 members only, viz. 17 of the house-of-nobles, 25 of the house-of-burgesses, and the 122 of the house-of-peasants, were not visibly connected by office with the executive or court. The house-of-nobility in this constitution represents about 13,500 individuals, and

property valued at 75,000,000 dollars: the house-of-clergy, 14,000 individuals, and 1,000,000 of dollars: the house-of-burgesses, about 66,000 individuals, and about 35,000,000 d.; and the house-of-peasantry, 2,000,000 of individuals, and 175,000,000 d. The three chambers of nobility, clergy, and burgesses, representing together only 90,000 individuals, had each as much weight in the legislature as the remaining house, representing 2,000,000 of people, with 175,000,000 d.: and the 72,417 people of condition, with property valued and taxed for 59,000,000 d., are not represented at all. The proposition of a new law is not here, as in France and the Netherlands, confined to the ministers of the crown; but, as in the British parliament, any member may bring in a bill for such an object. Each order deliberates separately, and the decision, as in Britain, requires only a simple majority; and a bill agreed to by three out of the four orders, becomes a law by receiving the royal assent. The diet must now be assembled once every three years in place of every five years. The king has the power to convoke an extraordinary diet. It continues its sittings for three months, and the members enjoy privileges in speech similar to those acknowledged in the British parliament. The nation imposes its own taxes, by means of its representatives assembled in diet, without whose consent no taxes can be imposed except those on the import and export of grain. The king cannot grant any monopoly, or mortgage the crown demesnes. On the assembly of every new diet, the states elect 12 members from each class, who form a jury court, with power to determine whether since the last assembly of the diet, any of the higher officers of justice have forfeited the public confidence by want of skill or partiality; and upon their report, the king dismisses the peccant judge. The new constitution established a committee for superintending the liberty of the press; but the chancellor engrosses nearly the whole power in this respect, so that S. can hardly be said to enjoy the invaluable possession of a free press.

*Administration.*] The executive administration of S. is equally complicated with the legislative. The king is at the head of the whole; and each department has its board or commission. The council-of-state—which is in fact a check upon the king, though professedly bearing the character of the king's adviser—consists of only 9 members, viz. the minister-of-justice, of foreign affairs, 6 councillors, and a chancellor; since the union of Norway, there has been added a minister for Norwegian affairs, and 2 councillors. Besides these, the several secretaries-of-state have a voice in the council. The business for this council is prepared by a commission of 8 members. The royal chancery has in one division the home, in another the foreign affairs. The treasury is managed by a chamber or exchequer; trade is superintended by a council, the mines by a board called a college. The army and navy have, in like manner, their respective heads. In the administration of justice, the highest court is called the royal tribunal, subordinate to it are two courts-of-appeal. The lower jurisdictions are the *landshofadinger* or governors in each province. There are separate jurisdictions for the military, the clergy, the physicians, the servants of the crown, and the inhabitants of particular towns. The territorial divisions of the kingdom, are, first, *laens*; next, *fogderies* or bailiwicks; thirdly, the *haerads* or smaller districts; and, finally, *sokens* or parishes.—In 1820 the ecclesiastical division of Sweden consisted of 12 bishoprics, 172 deaneries, and 2,400 parishes, with 1,223 ministers, all of whom are well provided for. There is one protestant nunnery in



Sweden for the unmarried daughters of the nobility.

*Revenue.*] The revenue of S. is derived from various sources,—the rent of the royal domains, a portion of the great tithes, duties on imports and exports, taxes on spirituous liquors, mines, forges, and chimneys, along with a poll-tax, and a few old monopolies. The whole amounted in 1837, to about 4,000,000 rixds., or £920,000. The national debt, as stated to the diet by the king, in March 1830, was 9,000,000 rixds., or little more than £200,000. The ordinary income in 1848 was calculated at 10,596,380 rixd. banco, in 1851 at 11,286,160 rixd.

## ORDINARY INCOME 1854-6.

Customs,	4,850,000 rixd.
Post-office,	600,000
Stamps,	710,000
Miscellaneous,	802,000
Other taxes,	4,700,000
Total,	11,792,000

## EXTRAORDINARY REVENUE.

Savings, &c., in the Exchequer,	3,000,000
Bank profit in 1850-2, in 1852,	450,000
Bank profit in 1850-2,	1,759,000
Corn dues,	700,000
Total,	5,909,000

To these sums must be added the Bank profit for 1853, and the increased brandy excise, calculated at 800,000 rixd. banco for ordinary and 3,000,000 rixd. for extraordinary income. The following was the budget for 1854-6. The calculations are all expressed in rix-dollars banco, and we add for the sake of comparison, the budgets asked at the two preceding diets. The sums stated are annual, but fixed once for all for the three years mentioned:

## ORDINARY BUDGET.

Sec. I. Civil list, &c., exclusive of 200,000 rixd. banco per annum from the riksgäld-office,	184-6	1851-3	1848-50
1. Justice,	780,840	780,840	686,700
2. Justice,	1,174,900	1,160,270	1,112,920
3. Foreign affairs,	225,650	225,650	225,650
4. Army,	4,387,950	4,261,330	4,162,180
5. Navy,	1,584,240	1,551,950	1,429,240
6. Civil service,	995,400	888,160	863,330
7. Finance,	1,956,620	1,756,620	1,749,950
8. Ecclesiastical,	1,210,650	1,194,980	1,145,100
9. Pension list, &c.,	648,350	650,260	539,840
Total,	12,964,000	12,470,040	11,914,910

In addition to the above, the following extra grants are demanded, spread over the three years ensuing:—

Extra—Justice,	400,000
Army,	2,227,866
Navy,	1,240,000
Civil service,	853,660
Finance,	156,000
Ecclesiastical,	514,400
War-credit, drawn on by the king just before the opening of the parliament,	500,000
Total,	5,891,926

*Army.*] The military force of this country has at no time been so large as might have been supposed, from the brilliancy of its achievements. The troops which crossed the Baltic along with Gustavus Adolphus, did not exceed 10,000 men; and though they subsequently received re-enforcements from Sweden, the chief part of his army were Germans. A progressive increase took place toward the close of the 16th century; but even in the splendid exploits of Charles XII. a large proportion of his military followers were foreigners, supported at the expense of the conquered territories. In the reign of Gustavus III. the Swedish army was larger; and in 1808, a British subsidy of £1,200,000 a-year, carried it to

50,000 regulars, and a reserve of 30,000. At present, it is on a peace-establishment, but on a scale sufficiently large for the limited means of the country; the corps of the army being, 1 of engineers, 3 regiments of artillery, 7 of cavalry, and 28 of infantry. This forms the regular army; but there is also a national force or militia, for the levy and support of which, the whole country is divided into petty districts, called *hemmans*, each of which is bound to furnish a soldier, and a spot of land for his maintenance. This land the soldier in time of peace cultivates himself, being pledged to attend at exercise only a specified number of days in each year; when permanently absent, the inhabitants of the district are bound to cultivate it for him: the officers are supported in the same manner; the colonel by a property placed in the centre of his regiment; the captain by a less extensive lot in the centre of his company, and so on down to the corporal. When in the field, these troops receive the same pay as the rest of the army, but at other times the expense on them is limited to clothing, which is furnished by the districts. The total amount of the Swedish army was, in 1837, 41,000 men, of whom the regular troops amounted to 10,531. In 1844, the regular or voluntarily enlisted troops were returned at 2,200 infantry, 5,446 artillery, and 1,000 horse-guards. In 1851, the total military force was estimated at 144,013, of whom 95,295 were militia. There is an hospital for invalids, and an academy for military sciences; several foundries, and a few fortified places.

*Navy.*] The Swedish navy formerly consisted of about 30 ships-of-the-line; about half that number of frigates, and several smaller vessels; and it has on many occasions distinguished itself by actions of singular bravery. The maritime power of S. has however of late years been on the decline; and it is said now to consist of little more than half the former number of ships. A number of galleys have been built of late years, which, in the shallow Baltic, are found to be more serviceable than vessels of greater force. The number of registered seamen has been computed at 18,000; but of these only a few are engaged in actual service, and receive pay in money. The greater part are distributed upon different parts of the coast; and, like the national troops, have certain portions of land allotted for their maintenance. In 1843, S. possessed 16 steamers, with an aggregate of 2,000 horse-power, and 14 of less than 16 horse-power each. Some of the Swedish steamers on the lakes burn wood. All these steamers were built in S., their machinery was Swedish, and their engineers natives of that country. In 1847 it was decided that no ships-of-the-line should be built for the future; but that those ships-of-the-line now in existence should be repaired or altered, and the main strength of the marine should consist in steamers. The new fleet was to be as follows: 4 steamers of 400-horse power, 50 guns, and 500 men; 8 steam frigates of 300-horse power, with 20 to 26 guns, and 450 men; 4 steam corvettes of 300-horse power, with 6 to 8 guns, and 110 men; 8 tow steamers of 100-horse power, and 60 men; 4 sailing frigates of 52 guns and 500 men; 4 sailing frigates of 32 guns and 320 men; 20 divisions of gun-boats, mounting 200 guns in all. The total force would then consist of 272 vessels, among which are 32 steamers, manned with 2,608 men.

*Early history.*] The aboriginal inhabitants of S. were of Finnic and Lapponian extraction. They appear to have gradually retreated into the higher latitudes before the advancing German nations, among whom the Goths and Swedes attained an early preponderance. The conquerors were governed by chiefs of traditional descent from the fabulous family of the Ynglingers, sprung from a son of Odin. In the 5th cent., we find them assuming the

title of kings of Upsala; and they governed S. under this name till 1068. Olof was the first to introduce, in 994, a regular form of government, and to embrace Christianity. At that period, however, the Goths and the Swedes were still distinct tribes, and for many centuries downwards the feuds of the two rival nations distracted the kingdom. In 1250, the powerful family of the Folkungen having won political supremacy, the rivalry of the two national parties yielded to the policy and influence of their ruler, and the Goths and Swedes became one nation. At this period, the frontier of S. only extended to Helsingland; but Eric XI. having subdued in 1248, the interior districts of Finland, and Torkel Knutson, the guardian of Birgir, having reduced Carrelia in 1293, S. became the immediate neighbour of Russia towards the close of the 13th cent. Magnus Smek, in 1332, acquired Schonen, Blekingen, and Halland; but these provinces were again lost in 1360. Tired of his oppressions, the Swedes revolted in 1363, and gave the crown to his nephew, Albert of Mecklenburg. The latter prince likewise failed to satisfy the expectations of the Swedish States, and in 1388 fell in battle against the Danes, whom his discontented subjects had called to their help. The following year, Queen Margaret of Denmark and Norway united S. with these two kingdoms, which union was consolidated by the treaty of Calmar in 1397. Many troubles and rebellions were the consequence of this union, and in 1448 S. and Norway chose their own king in the person of Charles Knutson. After Charles' death, several members of the family of Sture were successively elevated to the throne, under the title of Regents, though in reality with all the power and prerogatives of royalty.

*Middle history.* In 1520, Christian II. of Denmark having successfully invaded S., was recognised king by the Swedish States; but this monarch soon excited the displeasure of his new subjects, having, during the solemnities of his coronation, and notwithstanding the existence of a guarantee of amnesty, caused many Swedes of noble family to be put to death at Stockholm. Among the hostages who were treacherously carried prisoners to Denmark was Gustavus Vasa, one of those superior spirits who, by their penetrating intellect and intrepidity of soul, are qualified for obtaining and preserving ascendancy in turbulent times. This nobleman placed himself at the head of his discontented countrymen in 1521; and having succeeded in expelling the Danish arms from S., was proclaimed king in 1523. Under the auspices of this Swedish Alfred, the Reformation was introduced into the country,—the extensive estates of the church added to the crown domains,—and commerce and navigation promoted by alliances with England and Holland. The succession to the crown was secured to the descendants of Gustavus Vasa in 1544. His son and successor Eric XIV., who governed from 1560 to 1568, added Esthonia to S.; and in 1561 introduced the dignities of count and baron, till then unknown in the country. His brother, John II., who succeeded to the throne in 1568, reigned till 1592. By the peace of Stettin in 1570, John yielded Schonen, Halland, Blekingen, Herjedalen, and Gothland to Denmark; and in 1580 he embraced the Roman Catholic faith, in which religion he caused his son Sigismund to be educated. Sigismund having accepted the crown of Poland, was in 1602 driven from the throne of S. by his uncle Charles, a zealous Lutheran, who was crowned in 1604 under the name of Charles IX. He was succeeded by the great Gustavus Adolphus, who mounted the throne in his eighteenth year, and reigned from 1611 to 1632. Under his management the affairs of S. prospered, although his frequent wars with Russia, Denmark, and Poland, checked the progress of population and civilization. In 1613 he concluded peace with Denmark, and in 1617 a treaty with Russia, by which he gained Ingermannland. By the intervention of Richelieu, he concluded an armistice with Poland in 1629, by which he obtained Livonia, and saw the great object of his wishes within his grasp, in his being enabled to hasten to the aid of the Protestant princes of Germany in 1630, and by this movement to lay the foundation of that influence which S. was afterwards to exert over the political destinies of the North-west of Europe. His schemes were, however, cut short by his death in the battle of Lutzen, on the 6th November 1632. Gustavus was succeeded by his infant daughter, Christina, during whose minority the talented chancellor Oxenstierna held the reins of government, and conducted the war in Germany, which terminated favourably for S., as she thereby acquired the duchies of Bremen and Verden, all Upper with part of Lower Pomerania, the city of Wismar, and the isle of Rugen, together with 5,000,000 crowns, besides acquiring, in the course of a war with Denmark, the islands of Gothland and Oesel. Before the peace, S. maintained above 100 garrisons in Germany, and could lay under contribution the whole country, from the Baltic to the Lake of Constance, besides supporting an army of 70,000 veterans. Such was the state of S. at the peace of Munster in 1648. Christina abdicated in 1654, and was succeeded by her cousin, the Count Palatine of Zweibrücken, Charles Gustavus, who reigned from 1654 to 1660. Entering into a war with John Casimir, king of Poland, in 1655, he overran the whole kingdom in three months; and Casimir was forced to retire to Silesia, and abdicate the Polish crown. His rapid conquest exciting the jealousy of Russia, Denmark, and Brandenburg, an alliance was formed against him. In Livonia the Swedes were attacked by the Russians on the side of Holstein, in Bremen by the Danes, and in Prussia by the Elector of Brandenburg; while the Austrians marched an army into Poland to assist John Casimir. Charles, however, was generally successful against this coalition. Having subdued all the Danish islands in the Baltic, he besieged

Copenhagen twice; but, when the Danish capital was upon the point of surrendering, it was relieved by the Dutch fleet, which beat the Swedish armament in the Sound, and forced its way into the harbour of Copenhagen. England in the meantime declared for S.; but Brandenburg attacked Pomerania, and the German emperor aided Denmark. Charles renewed the war in 1660; but his sudden death restored peace to the North. He was succeeded by his son Charles, then a minor, whose regency concluded a peace at Oliva, on the 3d of May 1660, with the Poles, in which Casimir renounced his pretensions to the crowns of Sweden and Livonia and Esthonia. The peace of Copenhagen, 6th June 1660, assured to S., Schonen, Halland, Blekingen, and Bahus; the isle of Bornholm, and Drontheim in Norway, were restored to Denmark; and a free passage through the Sound granted to the Swedes. Soon after this the disputes with the Dutch were amicably settled, and peace concluded with the Russians at Cordis.

*Charles XII. to Gustavus IV.* S. was at the height of her prosperity and glory, when Charles XII. ascended the throne. He was the absolute master of Sweden, Finland, Cingia, Ingermannland, Livonia, the duchies of Bremen and Verden, the isle of Rugen, and great part of Pomerania; all of which had been secured to his Crown by the treaties of Munster, Oliva, and Ryswick, and the terror of the Swedish arms. His subjects were poor, but loyal, brave, and hardy; his finances in excellent order; and the administration in the hands of able ministers. But the prosperity of S. in the hands of a monarch merely warlike, could not be of long duration. Charles, though a warrior, was no statesman, and his frantic exploits have more the appearance of romance than history. He governed Sweden from 1697 to 1718. A secret alliance formed against him by the czar, Peter I., the king of Poland, Augustus II., and the king of Denmark, Frederic IV., occasioned the Northern war, which lasted from 1700 to 1720, and of which Charles did not witness the termination. Charles having entered the Ukraine, in concert with Mazepa, the hetman of the Cossacks, was employed in the siege of Pultava, when attacked and defeated by Peter I. on the 8th of July 1709; and on that decisive day, the political preponderance of Sweden in the North passed to Russia. While employed in the siege of Friedrickshall, he was shot, probably by the hand of an assassin, on the 13th of November 1718. Ulrica Eleonora, the younger sister of Charles, was elected queen on the death of her brother, by the States, who passed over Duke Frederic of Holstein, the son of an elder but deceased sister. From Eleonora the States demanded and obtained a formal renunciation of the unlimited power formerly claimed by the Crown, and she subsequently resigned the government in favour of her husband, Frederic, prince of Hesse-Cassel, whom the States recognized as king of Sweden, on the 2d May 1720. Shortly after this event the Northern war was terminated by several distinct treaties of peace. Prussia retained Lower Pomerania as far as the river Peme, Stettin, and the islands of Usedom and Wollin; but paid 2,000,000 dollars to S. Denmark gave back Wismar, Stralsund, and Rugen; and S. paid 600,000 d. to Denmark, and yielded its claim to the tolls of the Sound. Russia kept Livonia, Esthonia, and Ingermannland, and paid 2,000,000 d. to S. The unhappy predominance of the Swedish aristocracy distracted the councils of the State, and a ruinous war again commenced with Russia in 1741. Elizabeth of Russia refused to listen to proposals of peace until the succession to the Swedish throne should be determined; Ulrica Eleonora having died on the 5th December 1741, without issue. The Swedish States thereupon elected the Duke Charles Peter of Holstein, grandson of Charles' eldest sister; but this prince was called by Elizabeth to Petersburg, and named by her Grand Duke of the Russian empire; and the succession of the Swedish Crown was thereupon fixed, under Russian influence, upon the Duke of Holstein, Adolphus Frederic, a lineal descendant, by the mother's side, of Gustavus Vasa. Peace was thereupon concluded with Russia, at Abo, on the 7th August 1743; and S. yielded to Russia the whole of Finland to the river Kymen. Frederic, the husband of Ulrica, died on the 6th April 1751, and the influence of the aristocracy continued undiminished during the reign of his successor, Adolphus Frederic, who reigned from 1751 to 1771. The royal prerogatives were still more limited by the participation of S. in the unfortunate war against Prussia, which was terminated by the peace of Hamburg, on the 22d May 1762. Gustavus III., the son of Adolphus Frederic, mounted the throne on the 12th February 1771. This prince, to put an end to the intestine divisions which had so long troubled the kingdom, on the 19th August 1772, declared the constitution of 1680 to be again the law of the kingdom, relinquishing the unlimited sovereignty which he magnanimously shared with the States, now divided into the four classes of nobility, clergy, citizens, and peasantry. Under the protection of the armed Northern neutrality, Swedish commerce and industry revived. In 1784, S. obtained from France the little island of Bartholomew in the Antilles, where a free port was established. Unfortunately, however, for their country, the power of the nobility gathered daily strength; and Gustavus, with the view of thwarting their designs, exercised nearly unlimited authority in the national councils. In 1788 he suddenly attacked Russia. Victory remained undecided in a naval engagement in the gulf of Finland on the 17th July; but the Swedish nobles who served in the marine refused to serve farther in a war originating solely in the king's will. A momentary armistice ensued; during which, Gustavus called together a diet at Stockholm, on the 22d February 1789, in which he obtained, by the preponderance of the three inferior States, a declaration replacing in his hands almost unlimited power. Dis-



satisfied with the result of this diet, the nobles generally retired to their estates. In 1788, a Danish army had invaded S., in consequence of a sacred alliance with Russia; but the threats of England and Prussia compelled Denmark to resume her previous neutrality. Gustavus was now in a condition to prosecute the war with Russia, in which both parties confined their operations to naval movements. S. gained several advantages over her formidable adversary; but, being unsupported by England and Prussia, he concluded a peace at Werell, on the 14th August 1790, upon the *status quo*, and on the 19th October following, entered into a treaty of defensive alliance with Russia. In the diet at Gefle, held in 1792, Gustavus obtained a full recognition by the States of the national debt; but on the 16th of March he was assassinated at a masquerade by a pistol-shot from the hand of Ankerström, a deed unquestionably prompted by the long-cherished hatred of the aristocratical party. He was succeeded by his son, Gustavus IV., during whose minority, Duke Charles of Sudermania acted as regent. The regent Charles entered into an alliance with Denmark, on the 27th March 1794, for maintaining the neutral navigation of the Baltic. His line of policy, however, was completely departed from on Gustavus IV. assuming the reins of government, on the 1st November 1796. The party of Armfeldt, which had opposed the regent, was received into favour, and an alliance with Paul I. of Russia entered into, on the 24th October 1799. On the 16th December 1800, S. joined the armed Northern neutrality, yet remained inactive on the appearance of the British flag in the Sound. After the death of Paul, Gustavus joined in a treaty of commerce with England and Russia, concluded on 13th March 1802; upon which, England took off the embargo it had laid upon Swedish ships, and restored the island of St. Bartholomew in the West Indies, which it had occupied on the breaking out of hostilities. Gustavus had previously sold Wismar to Mecklenburg for 1,200,000 dollars, and no longer able to conceal his dislike to Napoleon, he now joined the interest of Great Britain, and entered the coalition against France in 1805, with British subsidies. On Prussia taking possession of Hanover, Gustavus wished to retain Lauenburg in security of his English subsidies, but was obliged to relinquish that possession to Prussia in 1806. In 1807 he meditated a movement, in concert with the English and Prussian arms, on the rear of the French forces; but the decisive battle of Jena rendered such a measure abortive, and he was subsequently obliged to evacuate Pomerania and the Isle of Rugen. Having entered into an alliance with England on the 8th February 1808, Denmark and Russia declared war against Gustavus on the 10th of the same month, Alexander having in vain endeavoured to persuade him to close the Baltic against English vessels till a general naval peace should be concluded, agreeably to the terms of the treaties of 1780 and 1800. Gustavus, on the contrary, refused to co-operate with the other Northern powers so long as French forces appeared on the coasts of the Baltic. The Russian forces, amounting to 60,000 men, entered Finland, which they conquered in the midst of winter, and Alexander, on the 16th of March 1809, declared this country to form an integral part of the Russian empire, Gustavus having previously arrested the Russian ambassador at Stockholm and seized upon his papers. Notwithstanding of these reverses, Gustavus undertook the conquest of Norway in April 1809; but the spirited defence made by Christian Augustus of Sleswick-Holstein, preserved that kingdom in its relations with Denmark. A disadvantageous war, exhausted finances, and his behaviour towards his own guards, produced the dethronement of Gustavus on the 13th April 1809. The Duke of Sudermania was again named regent, and, on the 6th of June, Gustavus IV. and his posterity were for ever excluded, by an act of the diet, from the Swedish throne, which the regent thereupon mounted under the name of Charles XIII.

*Recent history.* By the new constitution of S., proclaimed on the 7th June 1809, the royal power was limited to its prerogatives previous to 1773. As the aged king was without an heir, Prince Augustus of Sleswick-Holstein was named by the States heir to the crown. In the peace with Russia, concluded at Frederichsham on the 7th September 1809, S. yielded the whole of Finland, Eastern Bothnia, and also Eastern Lapland, with the islands of Aland, to Russia. The 4th and 5th articles of that treaty, as defining the present frontier of S. on the part of her powerful and ambitious ally, may be here quoted: "Art. 4. His majesty the king of S., as well for himself as his successors to the throne and kingdom of S., renounces irrevocably and in perpetuity, in favour of his majesty the emperor of all the Russias and his successors, all his rights and titles to the governments, hereafter specified, which have been conquered from the crown of S. in the present war—namely, the governments of Kymenagard, Nyland, and Tavastichus, Abo, and Bjorneborg, with the isles Aland, Savolax and Coreela, Wasa, Uleaborg, and part of W. Bothnia, extending to the river of Tornea, as shall be fixed in the subsequent article on the demarkation of the frontiers. These governments, with all their inhabitants, towns, ports, fortresses, villages, and islands, as well as all the dependencies, prerogatives, rights, and emoluments, shall henceforth belong in full property and sovereignty to the empire of Russia, and shall remain incorporated with it. To this effect his majesty the king of S. promises in the most solemn and obligatory manner, as well for himself as for his successors and all the kingdom of S., never to make any claim, direct or indirect, on the said governments, provinces, islands, and territories, all the inhabitants of which shall, in virtue of this renunciation, be relieved from the homage and oath of fidelity by which they were bound to the

crown of S. Art. 5. The sea of Aland [Aland's haf], the gulf of Bothnia, and the rivers Tornea and Muonio, shall hereafter form the frontier between Russia and the kingdom of S. The nearest islands at an equal distance from the mainland of Aland and Finland shall belong to Russia, and those which are nearest to the Swedish coast shall belong to S. The most advanced points of the Russian territory at the mouth of the river of Tornea shall be the isle Bjorken, the port of Rentchiann, and the peninsula upon which the towns of Tornea stands. The frontier shall then be extended along the river Tornea to the confluence of the two branches of that river, near Kengis. It shall then follow the course of the river Muonio, passing in front of Muonionis, Kaunimaka, Raunula, and Kilpisjauru, to Norway. In the course of the rivers Tornea and Muonio, such as it has been described, the islands situated to the E. of the Thalweg [valley lane] shall belong to Russia, and those to the W. of the Thalweg to Sweden." On the 10th of December, peace was concluded with Denmark; and on the 6th of January 1810, France, by the peace of Paris, restored Pomerania and Rugen to Sweden; upon which, S. joined the continental system against England. The sudden death of the prince royal on the 28th of May 1810, led the Swedish States, on the 26th August following, to elect the French marshal, Bernadotte, prince of Ponto-Corvo, heir to the crown of Sweden. "Of all the imperial generals Bernadotte was the least inclined to yield to Napoleon that servile deference which he so strictly exacted. Suddenly, and by a personal impulse rather than by any subtle combination of policy or intrigue, his name was mentioned at the diet of Oerebro, where the deputies of S. were assembled to choose a successor to Charles XIII. The consent of the prince had already been privately implied—that of the Emperor Napoleon was, not without misgivings, extorted from him. Bernadotte said, with characteristic astuteness, 'Will your Majesty make me greater than yourself, by compelling me to have refused a crown?' Napoleon replied, 'You may go—our destinies must be accomplished.' From that hour Bernadotte, or as he was thenceforward styled, Charles John, Crown-Prince of S., turned with no divided affection to his adopted country. The first acts of his government were to refuse to recruit the French fleet at Brest with Swedish sailors, and to struggle against the oppressive exigencies of the continental system. He liberated S. from that subservience to the political interests of France which had proved so fatal to her own greatness and to the welfare of her sovereigns. In 1812, a secret alliance was formed between S. and Russia; and in the following year the crown prince assumed the command of the combined forces of Northern Germany against the French empire. The reward of the services which he had rendered to the cause of European freedom, and to the armies of S., was his undisputed succession to that crown, which he owed neither to the sword nor to the arbitrary policy of his former master, but to the deliberate choice of the Swedish people. It was on his birth-day, in the year 1840, after a reign of nearly 30 years, that Charles John XIV. took occasion, in a speech from the throne, to survey with parental satisfaction the condition of his dominions. The population of the kingdom was so much increased, that the inhabitants of S. alone were equal in number to those of S. and Finland before the latter prov. had been torn from the former. The commerce and manufactures of the country had been doubled—agriculture improved—instruction diffused—the finances raised from a state of great embarrassment to complete prosperity—the national debt almost paid off—a civil and penal code proposed for promulgation—the great canals which unite the ocean with the Baltic had been completed—and, lastly, the secular hostility of the Swedish and Norwegian nations had given way to mutual confidence, cemented by kindred institutions and the enlightened government of the same sceptre." A brief glance at the leading events of Charles John's reign may be permitted us. The declaration of war against England on the 7th November 1810, was followed by the peace of 12th July 1812, upon the occupation of Swedish Pomerania by the French. S., which had obtained the promise of Norway for its participation in the war against Napoleon, only assumed an active part in the war in 1813. The crown prince, at the head of the army of the North, appeared in several battles against Napoleon, particularly in that of Lepsic. He then directed his arms against Denmark, which, on account of its alliance with France, had declared war against S., and forced Frederic VI. after having conquered Holstein and Sleswick, to sign the peace of Kiel on the 14th January 1814, by which S. obtained Norway, and assigned Swedish Pomerania to Denmark. The Norwegians made indeed an attempt, under Christian Frederic of Holstein-Sleswick—whom they had elected king on the 29th May 1814—to form an independent kingdom with a constitution proposed by the diet; but, forsaken by all European powers, that prince was obliged to leave Norway on the 16th of August, and Norway was formally united to the Swedish crown on the 21st October 1814. A constitution was however guaranteed to Norway on the 4th November following, under the modifications rendered necessary by its union with S. Although the crown prince did not appear in the Congress of Vienna, where the former king, Gustavus IV., presented, through the British admiral, Sir Sydney Smith, a memorial in which he urged the rights of his minor son to the Swedish throne, and although in S. itself a considerable party was formed against the crown prince, yet the friendly relations between Russia and S. were uninterrupted, and the latter joined the holy alliance on the 21st May 1816. Charles XIII. died on the 5th February 1818, and Charles John XIV. mounted the Swedish throne, although op-

posed by the Bourbon influence. By a treaty with Great Britain dated the 9th November 1825, the king of S. engaged to cause penal laws to be passed against the slave trade. In 1824, Charles XIV. named his son, Prince Oscar, born in 1799, viceroy of Norway; and in 1844, that prince ascended the throne under the title of Oscar I. The Swedes are now watching, with something more than the interest of mere spectators, the events now occurring almost within sight of their coasts. Let us hope that they will not let slip the present opportunity—never again probably to be recalled—of emancipating their country from an influence destined, if not speedily checked, to reduce them to a state of servile dependency upon their ambitious neighbour. As yet, the government of King Oscar has confined itself to a declaration of neutrality, which has been admitted by the belligerent powers. Symptoms have however manifested themselves, which portend that this passive attitude of S., the natural barrier against Russian aggression in the north, cannot last. S. it has been justly remarked, is more interested than any other power in preventing the Baltic from becoming a Russian lake. Nature has placed her there as a barrier between St. Petersburg and Copenhagen. Even if Denmark fell to Russia, the possession of the Sound by the latter power would not be complete until S. had fallen also. A sagacious writer, in a document to which more than ordinary interest is generally attached by the politicians of all Europe, thus expresses himself on the subject of Sweden's vital interest in the present struggle: "The loss of Finland is an ever-bleeding wound in the flank of S. From that province Russia draws nearly the whole of her maritime population and her timber. The restoration of Finland to its ancient owners would be an act of policy, the prudence and justice of which none dare gainsay. A line drawn from Viborg to the gulf of Onega would become on that side, in the N, the extreme limit of Russia. It is not in her centre that Russia is vulnerable; it is at her extremities; but if the blood is driven back towards her heart, she will choke. The head of the colossus is at Helsingfors, its right arm at Warsaw, its feet at Sebastopol. The possession of Finland gives Russia the dominion of the Baltic, as that of the Crimea makes her mistress of the Black sea; and as long as she possesses them, the peace of Europe is not sure. Finland, Poland, and the Crimea must be dragged out of the clutches of the double-headed eagle."

**SWEDEN**, a township of Oxford co., in the state of Maine, U. S., 67 m. SW of Augusta, crossed in the W by Saco river, and drained by the outlets of two ponds. Pop. in 1840, 670; in 1850, 696.—Also a township of Potter co., in the state of Pennsylvania, 115 m. NNW of Harrisburg, drained by one of the head branches of the Alleghany. Pop. in 1840, 153.—Also a township of Monroe co., in the state of New York, 22 m. W by N of Albany, drained by Salmon creek, and intersected by the Rochester, Lockport, and Niagara Falls railroad. The surface is undulating, and the soil chiefly moist argillaceous loam. Pop. in 1840, 1,884; in 1850, 3,623.

**SWEEDSBOROUGH**, a village of Woodwich township, Gloucester co., in the state of New Jersey, U. S., on the r. bank of Raccoon creek, 52 m. SSW of Trenton. Pop. in 1840, 500.

**SWEER**, an island of Northern Australia, in the S part of the gulf of Carpentaria, to the SE of Bentick island, in S lat. 17° 12', and E long. 139° 44'. It is about 9 m. in length.

**SWEET-SPRINGS**, a village of Monroe co., in the state of Virginia, U. S., in the valley of the Alleghany mountains, 153 m. W of Richmond. It is noted for its mineral waters.

**SWEFLING**, a parish in Suffolk, 3 m. W by N of Saxmundham, watered by the Ald. Area 1,120 acres. Pop. in 1831, 336; in 1851, 333.

**SWELL**, a parish in Somersetshire, 3½ m. SW by W of Langport. Area 891 acres. Pop. 137.

**SWELL (Lower)**, a parish in Gloucestershire, 1½ m. W of Stow-on-the-Wold. Area 1,670 acres. Pop. in 1831, 298; in 1851, 431.

**SWELL (Upper)**, a parish in Gloucestershire, 1½ m. NW of Stow-on-the-Wold. Area 1,460 acres. Pop. in 1831, 95; in 1851, 83.

**SWERFORD**, a parish in Oxfordshire, 5 m. NE of Chipping-Norton. Area 4,630 acres. Pop. 440.

**SWETTENHAM**, a parish in the co. palatine of Chester, 5 m. NW of Congleton, on the banks of the Dane, comprising the townships of Kermincham and Swettenham. Area 991 acres. Pop. 200.

**SWEVEGHEM**, a departiment and commune of

Belgium, in the prov. of West Flanders, and arrond. of Courtray. Pop. of dep., 5,189. The village is 4 m. E of Courtray, near the r. bank of the Slype-beke. It has several spinning-mills.

**SWEVEZELE**, a departiment and commune of Belgium, in the prov. of West Flanders, and arrond. of Bruges. Pop. of dep., 4,594. The village is 10 m. S of Bruges. It has manufactories of linen.

**SWIDRY**, a town of Poland, in the woiwodie of Masovia, obwod and 22 m. SW of Stanislawow, on the r. bank of the Vistula, at the confluence of the Zwitter.

**SWIENCIANY**, or **SVIENTZIANX**, a district and town of Russia in Europe, in the gov. and 48 m. from Vilna. Pop. 1,300.

**SWIENE**, or **SWINE**, one of the three great branches by which the Oder issues from the Stettinerhaff, to throw itself into the Baltic. It separates the island of Usedom from that of Wollin, and has a course of about 11 m.

**SWIENTY-KRZYŻ**, a Benedictine abbey in Poland, in the woiwodie of Sandomir, obwod and 18 m. WNW of Opatow, a little to the W of Hupia, on Mount Lysa, at an alt. of 1,920 Paris ft. above sea-level. It is the most elevated in Poland.

**SWIERCE**, a town of Poland, in the woiwodie and 56 m. E of Lublin, and obwod of Krastinaw, on the l. bank of the Bug. Pop. 610.

**SWIETLA**, a town of Austria, in Bohemia, in the circle and 18 m. S of Czeslau, on the r. bank of the Sazawa, at the confluence of a small river. Pop. 665. It has a glass-work, a paper and a pencil-mill.

**SWILLAND**, a parish in Suffolk, 6 m. N by E of Ipswich, crossed by the London and Norwich railway. Area 951 acres. Pop. in 1851, 267.

**SWILLINGTON**, a parish in the W. R. of Yorkshire, 5 m. ESE of Leeds, on the N bank of the Aire. Area 607 acres. Pop. in 1851, 607.

**SWILLY**, a rivulet of co. Donegal, which flows in a NE course of 16 m. to Lough Swilly, through a pleasant valley, screened with considerable hills.

**SWILLY (Lough)**, a large, long, and ramified inlet of the sea, in co. Donegal, extending southward, between the peninsula of Innishowen and the main body of the co. It enters between Dunaff-head on the E, and Fannat-point on the W, with a width at the entrance of 3½ m. The principal creeks or offsets are Ballyviesloker bay, Portbane, the small harbour of Buncrana, a comparatively large expansion opposite the SE extremity of Inch island, the comparatively large estuary of the Leenane up to the town of Ramelton; a considerable expansion up to Newtown-Connyngnam, and the navigable water-way of the river Swilly up to the vicinity of Letterkenny. The capacities of the lough for navigation and anchorage are singularly rich, yet minister surpassingly little to the purposes and prosperities of actual commerce. The immediate sea-boards from the entrance up to Inch island are mixedly hilly and mountainous. In 1841, about 2,000 acres of the bed of Lough S. were reclaimed from the tide, embanked, and completely drained by an English company.

**SWIMBRIDGE**, a parish in Devon, 4½ m. ESE of Barnstaple. Area 7,280 acres. Pop. 1,738.

**SWIN (Loch)**, an inlet of the sea, on the coast of Argylshire, opposite the island of Jura. It is 10½ m. long, and from 5 furl. to 2 m. broad. A series of abrupt and lofty hills encompasses the loch; and they terminate in rocky and deeply indented shores. On the E shore, about 2 m. from the entrance, stand the fine ruins of Castle-Swin.

**SWINBROOK**, a parish in Oxfordshire, 2 m. E of Burford. Area 1,140 acres. Pop. in 1851, 195.

**SWINBURN-WITH-COLWELL**, a township in



the p. of Chollerton, Northumberland, 7 m. N of Hexham. Area 4,452 acres. Pop. in 1851, 393.

SWINCOMBE, or SWYNCOMBE, a parish in Oxfordshire, 5 m. E by N of Wallingford. Area 2,646 acres. Pop. in 1841, 399; in 1851, 428.

SWINDERBY, a parish in Lincolnshire, 8½ m. SW of Lincoln, including the extra-parochial district of Morton. Area 1,640 acres. Pop. 541.

SWINDON, a parish in Gloucestershire, 2½ m. NW of Cheltenham, crossed by the Gloucester and Cheltenham railway. Area 721 acres. Pop. in 1841, 204; in 1851, 221.—Also a parish and market-town in Wilts, 17 m. NE by E of Chippenham, in the line of the Wilts and Berks canal. Area of the p., including the tything of Eastcott, 3,136 acres. Pop. in 1831, 1,742; in 1841, 2,459; in 1851, 4,876. The town is situated on a considerable eminence, commanding a fine prospect over parts of Berkshire and Gloucestershire. No particular manufacture is carried on in the town; but it is the residence of several persons of independent fortune. Extensive quarries in the neighbourhood, together with agricultural pursuits, afford employment to the greater part of the working pop. of the town. It is a polling-place for the N division of the co.

SWINDON-ON-RAILWAY, a new town in the above p., formed in 1841, when the whole of the locomotive department of the Great Western railway company was removed from Wootton-Basset to S., on account of its central position. A sum of nearly £500,000 has been expended by the company on their establishment here; while the number of mechanics, engine-drivers, firemen, fitters, smiths, cleaners, and labourers, varies from 300 to 350. A pop. of about 1,200 souls have thus been drawn towards a spot, but recently remarkable for nothing but heath and upland, for whose accommodation a new town has arisen consisting of a series of neat brick buildings within sight of the passing trains. A library, reading-room, and mechanics' institute have been organized; and a church in the style of the 14th cent., with a tower and spire 140 ft. high, and free sittings for 800 persons, with schoolhouses, and parsonage attached, has been built at an expense of nearly £8,000. To the S of the church a spacious piece of ground is to be laid out as a park or pleasure-ground for the inhabitants of New Swindon. The station is distant from London 77 m., from Bath 29½, from Bristol 41½, from Cheltenham 42½, and from Cirencester 18 miles.

SWINE, a parish in the E. R. of Yorkshire, 6 m. NNE of Kingston-upon-Hull, comprising the chapels of Bilton and South Skirlaugh, with the townships of Benningholme and Grange, Conistone, Ellerby, Ganstead, Marton, Swine, Thirtleby, Wyton, North Skirlaugh with Rowton, and part of Arnold township. Area 13,650 acres. Pop. 1,744.

SWINEFLEET, a chapelry in the p. of Whitgift, Yorkshire, 18 m. NE of Doncaster, on the S bank of the Ouse. Area 2,445 acres. Pop. in 1851, 1,152.

SWINEFORD, a town in the p. of Kilconduff, co. Mayo, 5½ m. NE of Kiltamagh. Pop. 991.

SWINEMUNDE, or SWIENEMUNDE, a town of Prussia, in the prov. of Pomerania, capital of the circle of Usedom-Wollin, in the regency and 38 m. NNW of Stettin, on the E coast of the island of Usedom, on the L bank of the Swiene, and near its entrance into the Baltic. Pop. in 1843, 4,035. It is well-built, and has straight and spacious streets. It has a custom-house, and extensive marine baths, and possesses several distilleries of brandy, extensive building-docks, and important fisheries. The port, which is the best in Prussia, was founded in 1740, and in 1817 was improved by the construction of two piers. The number of vessels which entered

the port of S. in 1849, was 1,239, of which 467 were Prussian, 416 English, 82 Dutch, 17 Russian, 8 French, 1 Belgian, 4 Neapolitan, 1 American, and the remainder from Hanover, Norway, and Baltic ports. The number of coasters ifwards was 469. In 1852, the number of entries was 1,664.

SWINESHEAD, a parish in Hunts, 3 m. SW by W of Kimbolton. Area 1,330 acres. Pop. in 1831, 202; in 1851, 267.—Also a parish and market-town in Lincolnshire, 6 m. WSW of Boston. Area of p., 6,100 acres. Pop. in 1801, 1,544; in 1831, 1,994; in 1851, 2,044. The town, which consists of one principal street, with several smaller ones diverging from it, is situated in the fens, for the more effectual drainage of which an act was obtained in 1840. It is irregularly built, but contains some good houses. The sea formerly flowed up to the town, and there was a harbour near the present market-place.

SWINESUND, a strait off the Skager-Rack, on the confines of Sweden and Norway, to the W of Frederickshald, in N lat. 59° 7', and E long. 11° 20'. It is 5 m. in length from E to W, and forms a communication between the Idde-fiord and Singel-fiord. It is bordered by lofty rocks, the summits of which at some points approach so closely as nearly to impede the passage of vessels.

SWINFORD, a parish in Leicestershire, 4 m. SSE of Lutterworth, bounded on the S and E by the Avon. Area 1,690 acres. Pop. in 1851, 420.

SWINFORD (KING'S), or SWINFORD-REGIS, a parish in Staffordshire, 3 m. NW by N of Stourbridge, intersected by the Staffordshire and Worcestershire canal. Area 7,315 acres. Pop. in 1831, 15,156; in 1851, 27,301. The p. possesses extensive coal, iron, and glass works, a wire-mill, and numerous potteries, besides large brick and tile yards.

SWINFORD (OLD), a parish, partly in Stafford, but principally in Worcestershire, 1½ m. NNW of Hagley. It includes the market-town of Stourbridge, and the hamlet of Amblecoat. Area 3,315 acres. Pop. in 1831, 13,874; in 1851, 20,238.

SWINGFIELD, a parish in Kent, 5 m. N of Folkstone. Area 2,638 acres. Pop. in 1851, 421.

SWINHOPE, a parish in Lincolnshire, 9 m. NW by W of Louth. Area 1,807 acres. Pop. 128.

SWINK, or CORRIDICO, a town of Illyria, in the gov. of Trieste, and circle of Istria, 10 m. SW of Pisino, on the Draga.

SWINNA, or SWENA, a small island of Orkney, belonging to the p. of South Ronaldshay, on the N side of the Pentland frith, off the entrance of Scalpa-flow. It is about 1½ m. in length, and less than ½ a m. in mean breadth. Its inhabitants—about 80 in number—are supported chiefly by the fisheries, and by piloting vessels through the circumjacent whirling seas. In its neighbourhood are the whirlpools, called 'the Wells of Swinna.' See PENTLAND-FRITH.

SWINNERTON, a parish in Staffordshire, 3 m. WNW of Stone, in the line of the Grand Trunk canal, and the Grand Junction railway. Area 6,529 acres. Pop. in 1831, 791; in 1851, 946.

SWINTON, a chapelry in the parish of Wath-upon-Dearne, Yorkshire, 4 m. NNE of Rotherham, intersected by the North Midland railway. Area 1,628 acres. Pop. in 1851, 1,817.

SWINTON-AND-SIMPRIN, a united parish in the district of Merse, Berwickshire. Area about 5,400 acres. Pop. in 1831, 971; in 1851, 994. The village of Swinton stands a little N of the centre of the p., on the road between Kelso and Berwick. In 1836 its pop. was 446.

SWINTON-WITH-WARTHERMASK, a township in the p. of Masham, Yorkshire, 7 m. SSW of Bedale. Area 1,614 acres. Pop. in 1851, 205.

SWIR. See SVZ.

SWIRZ, a town of Galicia, in the circle and 24 m. NW of Brzezany, on the NE bank of a small lake, formed by a river of the same name, which after a course of 45 m. throws itself into the Dniester.

SWITHLAND, a parish in Leicestershire, 2½ m. SW of Mount Sorrell. Area 2,180 acres. Pop. 285.

### SWITZERLAND,

The SCHWEIZ of the Germans, and SVIZZERA of the Italians, a small federal republic of Europe, occupying that region at the foot of the Alps, which in the earliest periods of history was denominated *Helvetia*, or the land of the Helvetians, from its ancient inhabitants, a tribe of German origin. It received its modern name, Switzerland, from one of its cantons, which was among the earliest to enrol itself in the league for the support of na-

tional freedom in the 14th cent., and which, in 1798, stood alone against the arms of France. The territory of the confederation extends from the parallels of 45° 50' to 47° 50' N; and from 5° 50' to 10° 30' E long. Its greatest length from E to W has been estimated at 200 m.; its greatest breadth at about 130 m. Its figure, however, is pretty nearly that of a right-angled triangle: having its right angle at Schaffhausen, and the two others on the Mont-du-Chat and the Munster-thal. Its superficies is estimated by Schoch at 18,825, but by Stein at only 15,000 British sq. m.—It is bounded on the N by Baden, the lake of Constance and Würtemberg; on the E by the small German principality of Lichtenstein and the Tyrol; on the S by Lombardy and the Sardinian states of Piedmont and Savoy; and on the W and NW by the French departments of the Ain, Jura, Doubs, and Haut-Rhin.

The Swiss confederacy at present consists of 22 independent cantons, viz:—

	Area according to Franciscl, in German sq. m.	Area according to Schoch, in British sq. m.	Pop. in 1816.	Pop. in 1838.	Pop. in 1860.
Zurich, . . . . .	32.33	987.5	182,123	231,576	250,698
Berne, . . . . .	120.83	3719.5	291,200	407,912	458,301
Lucerne, . . . . .	27.71	774	86,700	124,521	132,843
Uri, . . . . .	19.85	516	14,000	13,519	14,505
Schwytz or Schweiz, . . . . .	15.96	473	28,900	40,650	44,168
Underwalden [Haut and Bas] . . . . .	12.4	262.3	21,200	22,571	25,188
Glaris, . . . . .	13.2	456.875	26,575	29,348	30,213
Zug, . . . . .	4.08	118.25	14,300	15,322	17,461
Fribourg, . . . . .	26.6	494.5	67,814	91,145	99,891
Solothurn, or Soleure, . . . . .	12.01	279.5	47,882	63,196	69,674
Basel, Basle, or Bâle, . . . . .	8.71	268.75	45,900	65,424	77,583
Schaffhausen, . . . . .	5.46	172	30,000	32,582	35,300
Appenzell, . . . . .	7.21	225.75	55,000	50,876	54,893
St. Gall, . . . . .	35.57	860	130,301	158,893	169,625
The Grisons, or Bündten, . . . . .	140	3010	200	84,506	89,895
Aargau, or Argovia, . . . . .	23.7	774	143,960	182,755	199,852
Thurgau, or Thurgovia, . . . . .	12.46	358.19	78,533	84,126	88,908
Tessino, or Tessin, . . . . .	48.81	1193.25	88,793	113,923	117,750
Vaud, or the Pays-de-Vaud, . . . . .	55.70	1505	145,215	183,582	199,575
Valais, . . . . .	78.38	1978	62,809	76,590	81,559
Neuchâtel, . . . . .	13.22	322.5	49,722	58,616	70,753
Geneva, . . . . .	4.31	96.75	44,000	58,666	64,146
	718.70	18,825	1,728,127	2,190,258	2,392,340

*Physical features.* Switzerland has been celebrated by every traveller for its magnificent and picturesque scenery; and is certainly one of the most remarkable countries in Europe. Nature offers here the most striking contrasts; here the icy climate of the poles alternates with the heat of the equator,—the sterility of Greenland, with the smiling appearance of the valley of Tempe; icebergs rise towering into the air close upon the borders of fertile valleys,—luxuriant corn-fields are surrounded by immense and dreary plains of ice; in one step the traveller passes from the everlasting snow to the freshest verdure,—or from glaciers of chilling coldness to valleys from whose rocky sides the sunbeams are reflected with almost scorching power. S. is the most mountainous district of Europe. The northern parts are the most level; but even these present mountains rising upwards of 2,000 ft. above the level of the sea. The surface of the country rises gradually from N to S; and is throughout its whole extent covered by the system of the Alps, of which the centre seems to be the St. Gothard, from which the other chains—in which the highest points are found—diverge like radii in every direction.

*Mountains.* Only three groups of the gigantic Alpine barrier properly belong to S.: namely, 1st, The Swiss Alps, or *Alpes Lepontine*, or *Adula*, which run from the centre in a SW direction, or from Monte-Rosa on both sides of the Rhone, through the

Vallis-thal, by St. Gothard, to the Musselhorn and the Bernhardino in the Grisons, and separate Switzerland from Lombardy; 2d, The Rhaetian Alps, or *Alpes Rhaetice*, which run from the Bernhardino through the whole of the Grisons and the Tyrol, and southwards to Monte-Pelegrino; 3d, The Pennine Alps which border upon the Valais, and separate that district from Piedmont. The primitive Alps, which form the central ridges of these chains, consist of primitive granite. On the NE and SW side of the primitive Alps run calcareous Alps, consisting of slate and floetz rock. On the exterior of these appear alluvial ridges of sand-stone and marl; and on the N and NW side of these ridges run the calcareous chains of the Jura. The Alps are generally divided into the High, Middle, and Low Alps. The first rise from 8,000 to 15,000 ft. above the level of the sea, and are covered with perpetual snow and ice; their sides present naked and precipitous rocks, with here and there a patch of vegetation; and the immense masses of ice and snow which are piled upon their summits form inexhaustible reservoirs to the rivers which flow from the Alpine heights towards the lower countries of Europe. The Middle Alps begin at about 5,500 ft. above the sea, and rise to the line of perpetual congelation; they are rich in magnificent scenery, and covered with hardy Alpine plants; here too the most elevated pasture-districts occur. The Lower Alps commence with an eleva-



tion of about 2,000 ft., and extend to 5,500 ft.; they are covered with forests and afford the earliest pasture in spring. See article ALPS. We subjoin the heights in English ft. of the principal Alpine summits, from Ebel, Saussure, Tralles, Weiss, Welden, Forbes, &c.:—

Monte Rosa in Valais,	15,170
The Muttlerhorn in Valais,	14,784
The Finsteraarhorn in Berne,	14,106
The peak of the Furca, M. St. Gothard,	14,087
The Jungfrau in Berne,	13,718
The Mönchhorn in Berne,	13,498
The Schreckhorn in Berne,	13,386
The Eiger in Berne,	13,075
The Wetterhorn in Berne,	12,470
The Blümlis alp in Berne,	12,140
The Alt-Els in Berne,	12,194
The Gallenstock in Uri,	12,481
The Doldenhorn in Berne,	11,933
The Tödi Berg in Glaris,	11,818
The Sustenhorn in Uri,	11,605
The Tölis in Unterwalden,	11,540
The Spitzlberg in Uri,	11,374
The St. Bernhard in Valais,	11,116
The Kistenberg in Glaris,	11,091
The Simplon in Valais,	11,541
The Vogelberg in Grisons,	10,965
The Scheerhorn in Uri,	10,864
The Diableret in Vaud,	10,765
The Spanieret in Uri,	10,752
The Dent-de-Midi,	10,455
The Jochberg in Unterwalden,	10,368
The Fleudo, a peak of the Gothard,	10,186
The Blakenstock in Uri,	10,176
The Bernhardino in Grisons,	10,137
The Windgell in Uri,	9,962
The Seesalpiana in Grisons,	9,820
The Dent-de-Morcles in Vaud,	9,547
The Glärnisch in Glaris,	9,496
The Haustock in Glaris,	9,493
The Grimsel in Berne,	9,460
The Prosa, a peak of the Gothard,	9,250
The Wellisstock in Unterwalden,	9,107
The Galanda in the Lower Grisons,	8,925
The Felsen-Kamen in Grisons,	8,345
The pass of the Furca,	8,316
The Sentis in Appenzell,	8,181
The Niesen in Berne,	7,820
The Col-de-Balme in Valais,	7,558
The Wegghis in Glaris,	7,402
The Gemmi in Berne,	7,378
The Stockhorn in Berne,	7,218
The pass of the Simplon in Valais,	6,579
The Scheideck in Berne,	6,448

To the W of the Alps, along the boundaries of France, runs a calcareous ridge of the Jura mountains, lower than the Alps, but presenting many beautiful valleys and picturesque points of scenery. The highest summits of this ridge are:

Recolet-de-Thoery, highest summit,	5,642
Grand Colombier,	5,536
Montendre,	5,463
La Dole,	5,453
Crite-La-Goutte,	5,324

The Jorat, a sandstone ridge, runs through the Canton de Vaud, and unites the Alps with the Jura. To it belong

Mont Pelérin in Vaud,	4,083
The Chalet-a-Gobet,	3,010

*Rivers and lakes.*] The principal river of S. is the Rhine, which has its three sources in the Rhætan mountains to the E of the Gothard, and pursues a course of above 200 m. within Switzerland, or on its borders. The Farther Rhine collects its waters from the Crispalt, a branch of the St. Gothard, the Tavetscher-thal, and a small lake in the Urseren-thal; and flows through the valley of Disentis along with the Middle Rhine which descends from the Luckmaier, a mountain in the Medelsee-thal. The Hither or Upper Rhine flows from mount Avicula, and joins the first two torrents united under the name of the Lower Rhine, in front of the picturesque castle of Reichenau, at an elevation of above 6,180 English feet above the level of the sea. It

then flows through the Rheinwald, a magnificent and stupendous ravine, bordered by perpendicular rocks, which rise to the height of 3,000 ft. on both sides, and are clothed to their summits with stately firs. This river then flows through the lake of Constance from E to W, and after passing Schaffhausen, forms a celebrated cataract, which, with the remainder of its course, have been already described in our account of Germany.—The Rhone, the second great Swiss river, rises in a glacier of the Furca, and soon after receives the Eler. Before entering the lake of Geneva it receives the Siders, the Sitter, the Bionza, and the Dranse; but after quitting the canton of Geneva it becomes a French river.—The Tessin or Ticino also rises in the Gothard, and flows towards the Lago-Maggiore in the Italian territories.—The Inn rises on the S side of the Septimer-berg, from a small lake called Lungin. It is called the Aqua-de-Oen at its entrance into the lake of Sits or Zeglio, a short distance from its source in the Grisons.—The lakes of S. are numerous, and some of them of considerable magnitude. The lake of Geneva, the ancient *Lemanus*, called by the French *Lac Lemman*, covers a surface of above 330 sq. m., and is 1,230 ft. above the level of the sea. The Rhone flows through the 'clear placid Leman,' and its banks exhibit the most lovely scenery, having on one side the Alps, and on the other the heights of the Jura. The depth of this lake—though evidently gradually diminishing like most other fresh water lakes—is in some places 1,000 ft. The water frequently fluctuates greatly within a few hours. These sudden flows and ebbs, or occasional ruffings, are called *seiches*.—The lake of Constance or Constance lies between the cantons of Thurgau and St. Gall, and is the next in size.—The Lago-Lugano in the cant. of Tessino, at an elevation of 852 ft. above the sea, nearly 25 m. long, and 6 m. broad in some places, communicates with the Italian Lago Maggiore by the Tresa.—The lake of Luzern, called also the lake of the Forest-towns, lies at an elevation of 1,408 ft. above the sea, between the cantons of Luzern, Uri, Schwytz, and Unterwalden. It is above 20 m. in length, and from 8 to 10 m. in breadth. Its greatest depth is about 600 ft., and its navigation is dangerous. The lake of Zurich is a very romantic sheet of water, about 23 m. long, and 4 m. broad.—The lake of Neufchatel or Neuenburg, is about the same extent as that of Zurich.—The lake of Thun, in the cant. of Berne, is 4 or 5 leagues long, and almost a league wide. Its depth is 350 ft., and its height 1,900 ft. above the sea.—The lake of Brienz, in the same cant., is much smaller; but its aspect is more wild than that of any other lake in S., for its high calcareous mountains descend rapidly to the water.—Among the smaller lakes are the lake of Morat, near Aventicum; the lake of Biel, with the beautiful island of St. Pierre, celebrated by Rousseau's stay on it; and the Lac-de-Joux, in the Vaud.—Many thermal springs occur among the valleys of the Alps, which some geologists have attributed to the presence of pyrites in the soil, others to the subterranean fires which are supposed to have first elevated these rocks by volcanic agency.

*Climate.*] From the great elevation of S., the air is pure and salubrious; and though in some of the valleys the heat of summer be intense, yet the atmosphere is in general much cooler than might be expected from the latitude. Three different climates may be said to exist in Switzerland, viz.: The cold in the Alps, the temperate in the plains, and the hot in the cant. of Tessino which has an Italian sky and climate. In the valleys of Switzerland, however, the temp. of districts at a short distance from one

another, often varies extremely. The elevation of the valley of Untersee is the same as that of Gestein; yet the therm. in 1822-3 fell only to 8° below zero in the former, whereas in the latter it fell to 14½°, and at Berne to 16°. According to Humboldt, on the southern Alps, between the latitude of 45½° and 46° the inferior limit of perpetual snow is at the height of 8,768 ft.; according to other authorities the height at which it never melts is 9,268 ft. The distance between the trees and snow is 2,880 ft.; the upper limit of trees 5,880 ft.—the last species of trees towards the snow is the *Pinus abies*; and the distance between the snow and the corn, 4,480 ft.

*Productions.*] The great variety in temperature enables S. to produce a greater variety of plants than is found in almost any other region of the same extent in Europe. Wine is produced in the cantons of Tessino, Vaud, Geneva, Valais, Neuchâtel, Berne, Thurgau, Aargau, Schaffhausen, and Zurich; the Vin-de-Vaud, and the Vin-de-la-Cote of Geneva are esteemed the best Swiss wines. The fruits are pears, apples, cherries, plums, peaches, olives, figs, and lemons.—Cattle are numerous in S., and form the chief wealth of the inhabitants. The tame animals are those common to Europe; but there are a few wild animals which are rarely found in any other place. Among these may be mentioned the chamois and the steinbuck, both inhabiting the Alps; but the latter is extremely rare. In some cantons, lynxes, wolves, and bears are yet found. Birds of prey are not unfrequent, among which is the *lammergeyer* or vulture of the Alps, [*Vultur barbatus* L.] which is often known to carry off lambs, and of which the peasants relate incredible stories. Fish are plentiful in the lakes, amongst them we find the *Cyprinus nasus*, the *Coppus*, the *Salmo lacustris*, the *Salmo Umbra* or *chevalier Omble*, and the *trout* or *ferat*.—It might be supposed from the mountainous nature of S., that minerals should be here found in plenty; but this appears not to be the case. In some of the streams particles of gold occur, and we believe there is a gold-mine wrought in the Valais; mines of silver also have been mentioned, but the quantity of these metals seems to be inconsiderable. Iron is not scarce, particularly in the district called Sargans, and copper and lead are found in different places. The other mineral productions of S. are coal, nitre, sulphur, rock-crystal, marble, slate, granite, porphyry, porcelain, serpentine, steatite, asbestos, amianthus, jasper, agate, lapis ollaris, feldspar, and tremolite. Bitumen occurs in Neuchâtel. Mineral waters are found in different places. There are salt-springs in the Vaud.

*Agriculture and rural industry.*] The agriculture of S. is necessarily of a peculiar nature, and on a very confined scale. Cattle, sheep, and goats, constitute the chief wealth and support of the Swiss proprietor, who farms his own small portion of land, being usually no more than his family share of the paternal inheritance. Wherever the nature of the soil permits, agriculture is conducted; but the corn raised in any district never supplies the home-consumption, and some cantons scarcely possess a single field of grain. The best agricultural districts extend from Basle to Geneva, and along the borders of the lake of Constance, and the banks of the Rhine. One great obstacle to the improvement of agriculture in S. arises from the necessary employment of so many hands in herding the cattle during the summer, while the winter offers little opportunity for outdoor work. Kastrofer, in his recent work on the rural economy of S., also mentions the non-application or injudicious use of manure,—the neglect of the means of increasing the quantity of winter-fodder, of irrigation, and of green crops; and

the wretched construction of the ploughs and other instruments of agricultural labour. To procure winter-fodder for the cattle is a most important object in S.: every blade of grass, therefore, is collected with the greatest care. In places inaccessible to cattle, Malthus informs us, the peasant sometimes cuts hay with crampons on his feet to prevent him sliding down the precipices. Grass not three inches high is cut in some places three times a-year; and in the valleys the fields are shaven as close as a bowling-green. The scythes commonly used in S. have light short blades, and are we believe principally of German manufacture. The handles are much bent, and the mower stands tolerably upright. The sweep is not very great; but the Swiss are admirable mowers. Patches of grass are seen on the Alps, growing under ledges of rock, where no cattle could climb, cut as close and as smooth as a dexterous English gardener could shave a grass plot. They put an exquisite edge on their scythes by hammering them out on little anvils kept for the purpose, instead of thinning the edge by a coarse stone, as our mowers do; and their scythes by this treatment consequently last much longer. The operation is performed once in a day or two; and the edge is afterwards still further sharpened by a sort of strap or prepared board. The extent of a pasture is estimated by the number of cows which it maintains; six or eight goats are deemed equal to a cow; but a horse is reckoned as five or six cows, because he roots up the grass. The mountain-pastures are rented at so much per cow's feed, from the 15th of May to the 18th of October. And the cows are hired from the peasants for the same period; at the end of it, both are restored to their owners. In other parts the proprietors of the pastures have the cows; or the proprietors of the cows rent the land. The proceeds of a cow are estimated at £3 or £3 10s. viz.: 25s. in summer; and during the time they are kept in the valleys or in the house, £2. The Swiss cows yield more milk than those of Lombardy; but after the third generation their milk falls off. In some parts of Switzerland they yield on an average 12 English quarts a-day; and with 40 cows, a cheese of 45 lbs. can be made daily. The Swiss dairies produce great varieties of cheese; the most celebrated is the *schabzieger*, which is made by the mountaineers of Glarus alone.

*Industry and Commerce.*] The industry of the Swiss is very great, and enables their rugged country to support a comparatively numerous population. The principal branches of manufacture are cotton and woollen goods, linen, silk, and leather, jewellery ware, and particularly watches. "For the last twenty years," says Mr. Bowring in his report on the commerce and manufactures of S. in 1836, "the small natural resources, the labour, and the capital of S., have been left to their spontaneous, unrestrained, unforced development. I doubt whether any country has made the same comparative progress in prosperity; I certainly am acquainted with none in which that prosperity has descended so low and spread so widely as among the laborious classes of the Swiss manufacturing districts. I was surprised to find what large proportions of them had by their savings acquired landed property, how many of them dwelt in houses and cultivated fields and gardens, which their labour had made their own. In the mountains of the Jura and Appenzell, along the borders of the lakes of Zurich and Constance, everywhere indeed where the operatives are settled, I found in their habitation a mass of enjoyments, such as are possessed by few of similar station in other countries. Their mode of life, half-pastoral, half-manufacturing, is no doubt exceeding-



ly friendly to happiness. With them no time is lost, for, when their agricultural labour is over, the loom, the vice, the turning engine, the multitudinous occupations of manufacture, engage their attention. If there be any ground for anxiety it is in the gradual intrusion of machinery upon manual labour—an intrusion everywhere felt, and which menaces S. more immediately and more alarmingly, since so great a portion of her manufactures is produced by domestic labour. Hand-tambouring, embroidery, and lace-making, which have hitherto given occupation to an immense number of hands in St. Gall, Neuchâtel, and Appenzell, have lately been invaded by the mechanical arts, and the invasion has driven down the gains of the hand-labourer to the minimum means of existence. I saw, however, in Thurgovia, machinery for embroidery in the dwellings of the labouring people; and the hope may reasonably be indulged—in a country where the resources of human ingenuity have nothing to control them, and at a period which promises a long unbroken peace, and which offers the means of intercourse and communication with the universal world—a country like S., unembarrassed by public debt or heavy State expenses, now possessing wealth, activity, knowledge, and tranquillity, will not fail to have her fair share of the general prosperity, and will find the means of accommodating herself to all those agricultural and manufacturing changes which civilization, education, and experience bring with them. It is most true that S. has to struggle against many impediments and disadvantages. The difficulties of commercial intercourse are greatly increased by the mountainous character of the country. In the canton of Tessin two of the three roads by which it communicates with the neighbouring districts are closed from November to March. In the Grisons, communications are really more easily accomplished with foreign countries than with the adjacent parts of S. itself. The average rate of transport is very much higher for a given distance than in France, Germany, or Italy; and not only is the cost of carriage great, but in many of the most industrious parts of S. almost every article of consumption has to be brought from afar. Some of the most prosperous manufactures of S. have their seats on the mountains, in cottages, villages, and towns, from 2,000 to 3,000 ft. above the level of the sea. It is true that the roads are for the most part excellent, and kept habitually in good order; and that the disadvantages under which S. labours, of climate, surface, soil, and remoteness, are more than counterbalanced by the impediments, the taxation, the restrictions, the prohibitions, of the countries with which she has to compete; but the fact is not, therefore, the less interesting, nor the less worthy to be repeated, that she has mastered all the difficulties of a most difficult position by the application of sound principles." A more recent reporter, M. de Gonzenbach, secretary of state to the confederation, says, that there were in S., in 1844, 131 spinneries, of which 70 were in the canton of Zurich, turning 660,000 spindles, and producing 160,000 quintals of cotton yarn. The imports of raw cotton for their supply had for several years been in constant progression; in 1842, the last year cited, the quantity was 228,000 quintals. The number of factory operatives employed was upwards of 10,000. Of power-loom factories there were 18, in which yarn was worked up into 100,000 pieces yearly. But the far larger portion of the fabrics was still woven by hand, in common looms, of which there were not far from 100,000. The canton of Zurich alone reckoned from 18,000 to 20,000 hand-loom weavers, who wove each year nearly 1,000,000 of pieces of all

kinds. The situation of the hand-loom weavers was, however, becoming very precarious, in consequence of the fearful competition of the power-loom. Jacquard looms had recently been introduced into several cantons, and it was hoped that the operative crisis in the cotton manufacture might thus by degrees be alleviated and pass away. Next after cotton ranks the silk manufacture. It employed in 1846 about 40,000 workpeople. Silk-worms are cultivated in the cantons of the Grisons and the Tessin, which yield a product of about 50,000 pounds [the Swiss is rather more than the English pound] of silk. The quantity of raw silk, and of silk, and half silk fabrics imported besides, was, in 1842, 28,300; and, in 1843, 29,900 quintals. In piece-goods, the manufacture is chiefly in plain silks, from the strongest taffetas to the lightest fabrics. The ribband manufacture, the chief seat of which is at Basle, although largely extended also in Berne, Soleure, Argovia, Thurgovia, and Zurich, is, however, the principal branch of silk industry, and enjoys a great repute. Exported to Paris, the ribbands of Basle are so alike to the finished products of Lyons and St. Etienne, as not unfrequently, it is said, to be purchased and re-exported to S. as the choice fabrics of those famous places. The manufacture of flax and hemp, although no longer of the same consideration as formerly, was not, and is not, without importance. The raw material for working is amply produced in the cantons; flax is grown in Berne and Argovia, and hemp everywhere; but flax-spinning machinery was operating the same revolution in the linen as had been similarly accomplished through the same causes in the cotton manufacture. Flax was no longer spun by the Swiss female peasantry, except for household use. Foreign machine spun yarns were imported from all parts, but particularly from England. The imports of linen and hempen yarns and fabrics amounted, in 1842, to 14,600 quintals, and in 1843 to 14,000. The transition from spinning by hand to machine spinning was a great difficulty in the way of the establishment and extension of flax-spinning mills, and again, Swiss linen fabrics were repulsed by the prohibitive duties of all the bordering states. But several spinning-mills had been established, and every confidence was felt that the linen manufacture would progress and prosper like that of cotton. The woollen manufacture, M. de Gonzenbach reports, occupies the least important place in the textile industry of S., and is far from sufficing for domestic consumption. Flocks of the ovine race are extremely rare, and agriculture furnishes but a small quantity of raw material, and that is worked up in the places where produced. The greater part of the wool consumed is imported from Hungary, Bohemia, Wurtemberg, and Italy. Each canton possesses one or several manufactures of wool. There are twelve in the canton of Zurich, employing 500 or 600 workmen. The quantity of wool imported in 1843, was 13,000 quintals, a portion of which, however, only enters the country in transit. But the consumption of S. still requires, in addition to the home-manufactured products, a large importation of foreign-made woollen fabrics; in 1843, more than 28,000 quintals were thus imported. The report refers with just pride to the fact of the wealth and well-being which such an extent of consumption implies. The workmen of the towns, and the peasantry of the country, are always seen well clothed; there is not the humble proprietor of the most modest cottage who has not, besides his holiday suit, good and warm clothing for work days, and who does not renew it often. [Railways.] In Switzerland it appears that little has been done towards railway communication. One

short line of 4 kilometres from Basle to St. Louis, upon the French frontier, was opened at the end of December, 1845. Another line has been constructed from Basle to Zurich, by Baden. Several projects have been brought forward recently. The principal of these lines are the Basle to Luzern, by way of Olten; the Zurich to Soleure and Bieme, also by way of Olten; the Luzern to Altorf and the Lago-Maggiore; another from the same lake to the lake of Constanx; and, lastly, that from the Lago-Maggiore to Geneva.

*Money.* Accounts are kept in livres and batz; one Swiss livre being 10 batz, and the batz being of the value of three halfpence English money. Each petty state, however, insists on having its separate coinage; so that the French coins pass best throughout the country. The Swiss franc is equal to 1 franc 12 sous of French money. An important bill on monetary reform has recently been voted by the council of the states by 30 votes to 9. The French decimal system is to be adopted, the Swiss franc having henceforward the same value as that of France; the decimals will be batz, and the centimes rapas. A new coinage is to be struck in copper and mixed metal to the extent of 4,500,000 francs, and in silver to that of 7,500,000 fr. The Swiss *stunde* (hour or league) varies according to the nature of the ground. In very steep ascents it does not exceed 2 English m.; in lesser acclivities 2½ m., and in the mountains it is never more than 2½ m.

*Population.* Upwards of one-third of the surface of S., consisting of alps and glaciers, is wholly uninhabitable. The canton of Geneva is the most densely populated. Of the pop. of 1850, 2,392,740 in number, 1,417,754 were Protestants, and 971,840 Roman Catholics. About two-thirds speak German; the majority of the remaining third speak French; 110,000, Italian; and 57,000, Romansh—a corrupted dialect of the Latin which has been supposed to come very near to the colloquial dialect alleged to have been in use among the Romans. Most of the people speak these different languages very ill, especially the Germans, whose dialect even in German Switzerland, though nominally German, is not to be understood by Germans without considerable difficulty and close attention. "The worst German of all is, perhaps, spoken in the canton of Zurich; but other districts may well share the honour; the sing-song accent, the numerous diminutions, contractions, and omissions of the final syllable, everywhere heard in S., being in the highest degree offensive to a German ear. The peculiarities of dialect, varying often from commune to commune, are so strange as to furnish the philologist with much matter for curious research."—The Swiss are in general a robust and handsome race, their labour being such as invigorates without exhausting the human frame. The costumes of Switzerland are simple, and calculated rather for convenience than ostentation, but are not on that account the less graceful. The women of S. are physically much finer than the men, and beautiful faces, principally in the German style, are often met with. "The features are unusually large and full, the complexion clear and fresh, with light eyes and brown hair. The figure, though seldom slender, is well-proportioned and active." The teeth are however seldom good. "The universal spirit of economy keeps every Swiss table free from luxury, the richest citizen contenting himself with few and simple enjoyments of this kind; the effeminate indulgences which elsewhere have reached so lamentable a pitch are here unknown or left to foreigners at hotels, the natives contenting themselves with the simplest fare. Most Swiss families never mingle freely with any not precisely their equals, and strictly shut out all intercourse with those decidedly below them. Not only do the old families keep together in these little exclusive circles—the new are, in this respect, not a whit behind them. Marriages are seldom formed beyond the limits of the circle to

which every member of the several families belongs by right of birth, and to which no person born beyond the pale is admitted." One of the worst features in the Swiss character is the extreme jealousy which appears to subsist between the different cantons,—an evil which has affected all small states; as those of ancient Greece and the Italian republics.

*Religion.* The cantons in which the Roman Catholic faith is predominant, are, Luzern, Uri, Schwytz, Underwalden, Zug, Friburg, Soleure, Tessin, and Valais. The Protestant territories are Zurich, Berne, Basle, Schaffhausen, Vaud, Neuchatel, and Geneva. In Appenzell, Glarus, Thurgau, Aargau, St. Gall, and the Grisons, the pop. is partly Protestant, and partly Catholic, but both parties live together in the greatest harmony. The Catholics negotiated a concordat with the Pope, whose nuncio usually resides at Luzern or Friburg. Their dioceses are Basle, Lausanne, Sitten, Thur, Constance, Como, and Milan. They possess 190 cloisters, containing 3,500 monks and nuns. The Protestant form of church government is Presbyterianism; and the symbolical book is the Helvetic confession. The Jews are chiefly located in Aargau. Dr Alexander says, "in respect of doctrine there is no great difference, so far as creeds go, between the different cantonal churches, almost all of them holding professedly by the ancient Helvetic confession; and in point of order they are more or less strictly conformed to the Presbyterian model, though in some cases with a slight infusion of the Episcopal element, and in others with certain leanings to the congregational platform. Thus as respects the appointment of the ministers, in some cantons the choice rests exclusively with the people, who have power to appoint and power to remove, independent of any superior control; in other cantons the government nominates the clergy, and the people have not even a veto upon the appointment; in other cases the people send up a list to the government, with whom the final appointment rests; in some cases a right of interference belongs to the body of clergy already in office; and in one case, that of Neuchatel, the clerical body absorb the entire power, subject only to the supervision of the king of Prussia, who never interferes with their movements. For the most part the presbyterian parity is preserved amongst the clergy. These cantonal churches stand, for the most part, in a relation of very great subjection to the state; their constitution in this respect being thoroughly Erastian. The degree of subjection is not exactly the same for all, but in none of the cantons does the church enjoy any adequate measure of liberty: perhaps the most free is the church of Neuchatel, and the least free that of Berne."

*Establishments for education.* A good deal has been done in the Protestant cantons for general instruction, and in this respect they greatly surpass the Catholic districts; at the same time it must be confessed that education is much neglected in Switzerland, and that the various seminaries have by no means kept pace with the spirit of the times. Geneva forms an honourable exception to this remark, offering excellent means of public and private instruction; and the Pays-de-Vaud has also good educational establishments. Basle is the seat of the only Swiss university, and an excellent missionary seminary. The course of education in the parochial schools, comprises reading, writing, linear drawing, orthography and grammar, arithmetic and book keeping, singing, the elements of geography, the history of S., the elements of natural philosophy with its practical applications, exercises in composition, instruction in the rights and duties of a citi-



zen, and religious instruction. In the Catholic cantons, however, the instruction is generally confined to religious lessons, reading, writing, and arithmetic. No teacher is allowed to take charge of a school until he has obtained a diploma stating his capability of directing its education. "Besides this, he must have obtained a certificate of character from the director of the normal school in which he was educated, and in many cases another from a clergyman of his own sect, stating his capability of conducting the religious education of a school. This latter point is always strictly inquired into, either by the council of inspection, which examines the candidates, or by a clergyman of the sect of which the candidate is a member." The difficulties arising from sectarian differences, which have hitherto proved insurmountable obstacles in England, have been thus overcome in S.:—"Each canton is divided into a certain number of communes or parishes, and each of these communes is required by law to furnish sufficient school-room for the education of its children, and to provide a certain salary, the minimum of which is fixed by the cantonal government, and a house for each master it receives from the normal school of the canton. These communal schools are, in a majority of cases, conducted by masters chosen from the most numerous religious sect in the commune, unless there are sufficient numbers of the different religious bodies to require more than one school, when one school is conducted by a master belonging to one sect, and the other by a master chosen from a different sect. The children of those parents, who differ in religion from the master of the school, are permitted to absent themselves from the doctrinal lessons, and are required to obtain instruction in the religious doctrines of their own creed, from clergy of their own persuasion."

*Constitution.* The Swiss cantons are united into a confederacy for the maintenance of their mutual liberty and independence against all attacks from without, and for the preservation of the public peace and order within. "The Swiss confederation," says Mr. Bowring, in his valuable report already quoted, "consists, really, of twenty-four separate nations, linked together by the slightest tie—linked, indeed, rather by the vicissitudes of a common fortune, through more than five centuries, than by any general or national alliance. The cantonal independence has been singularly preserved. Revolutions which have completely changed the constitution and the laws of one district have had little or no influence upon another. The boundary of a canton has bounded the most marked and violent political commotions. Civil war itself has not spread beyond the narrow sphere of local interests. There is no other example in history of the long continuance of separate adjacent communities so small, and yet so wholly independent. S. is a federation of large political self-governed families." Though, in the different cantons, the inhabitants enjoy an almost absolute equality of rights and privileges, yet those advantages cease as soon they pass the narrow local territory to which they belong. A St. Galler, for example, is as much in a state of exclusion from the political rights of the inhabitants of Zurich or Appenzell as if he had been born in the remotest part of the globe. This separation into small communities has enabled the people directly to exercise many of those functions of government which are elsewhere committed to delegation or representation. In some of the cantons the direct approval of a majority of the whole people, publicly assembled, is necessary to give to any act of the legislature the form and sanction of law. In almost all the elec-

toral suffrage is very widely diffused, and, in the majority of instances, universal." The general business is transacted at a diet which assembles each year in July, or more frequently, and to which each canton sends one deputy, or, in some instances, 3. This diet is held alternately at Zurich, Berne, and Luzern; the chief magistrate of the canton in which the diet assembles being president for that year. Treaties of peace or declarations of war require the assent of three-fourths of the deputies; all other matters are determined by a majority. "At the head of German S., in 1847, stood the canton of Berne, the largest and most important canton, with a young and active government, and a wakeful, animated population, the first representative of Swiss radicalism. Next came Zurich, also radical, but more cautious, as its pop. are chiefly engaged in manufactures, and there is still a powerful aristocratic party. The next canton adhering to radical principles is Aargau, which having a pop. half Catholic has had to go through many struggles, which could only have been overcome by an active and energetic government. With these three large cantons was associated Soleure, which, though entirely Catholic, has no Jesuitical tendencies; Thurgau, in most cases Glaris, and Outer-Rhodes (the half of Appenzell). St. Gall had shown some symptoms of an inclination to desert the cause of reform, to which it has so long adhered. The greater part of its pop. is Catholic; and the exertions of the Ultramontanists had not been without effect in sowing the seeds of hatred and discord. The Grisons had hitherto stood on the national side; and Tessin, though Catholic throughout, had an enlightened government, strongly opposed to the Jesuits, and anxiously endeavouring, by schools and a free press, to lead the people towards liberal principles.—Vaud, in French S., is entirely radical; Geneva, liberally inclined; Valais, on the other hand, quite in the hands of the Jesuits; and always seconded by Neuchâtel. The central point of the Jesuits was Freiburg, which, with the Sonderbund cantons, was the fountain of Swiss disturbance. Next in this order stood Luzern and the small cantons, Schwyz, Uri, Unterwalden, and Zug. The little half-canton, Appenzell-inner-Rhodes, though strictly Catholic, had stood aloof from leagues and associations, seeking to preserve a peaceful neutrality. The pop. of the Ultramontane cantons cannot at the greatest computation amount to a third of that of all S.; this third has, however, 12 voices in the diet, since Uri or Zug send as many members as Berne or Zurich."

*Military force and revenue.* In 1838, the cantons contributed to the army and revenue of the confederacy in the following proportion:—

Zurich,	4,632 men.	74,000 Swiss francs.
Berne, . . .	8,158	104,080
Lucerne,	2,490	26,010
Uri,	270	1,180
Schwyz,	813	3,012
Unterwalden,	451	1,910
Glaris, . .	587	1,615
Zug,	306	1,250
Friburg,	1,823	18,600
Soleure,	1,264	13,560
Basle,	1,328	22,950
Schauffhausen,	692	9,320
Appenzell,	1,018	9,220
St. Gall,	3,177	39,450
Grisons, . .	1,690	12,000
Aargau,	3,655	48,200
Thurgau,	1,682	22,800
Tessin,	2,278	18,040
Vaud,	3,672	59,280
Valais,	1,532	9,600
Neuchâtel,	1,172	24,000
Geneva,	1,173	22,000
	43,803	542,077

According to reports from the Swiss military department, the effective federal army of S., in 1854, musters, together with the supernumeraries, 125,156 men. The landwehr or militia supplies 150,000 more, so that 275,000 soldiers can be collected on an emergency. The *élite*, comprising the younger troops, going first to war, and even, if necessary, passing the frontier, is composed of men of from 21 to 29 years. The reserve does the internal service, and contains the men between the ages of 29 and 35. From that time to the 45th year the men serve in the landwehr, which may be called up in case of emergency. The federal staff mustered at the beginning of 1853—Colonels (including 2 of engineers and 5 of artillery), 47; lieutenant-colonels, 70; majors, 47; captains, 72; lieutenants, 14. Statistical returns from the military office give the following rates of the expense of the army, as paid by each inhabitant in the various states of Europe. It is, among others—9s. 5d. in France, 6s. in Prussia, 3s. 1½d. in Austria, 2s. 2d. in Russia, 10s. 6d. in England, and 10d. in Switzerland. The revenue of the year 1852 was £300,481; in 1851, it amounted to £549,378. The receipts of 1853 were £567,499. The expenses were £524,447; thus leaving a balance of £43,052. The highest item is that of the military department, being £57,132, or £12,917 above the original budget. The whole federal administration cost £11,764; the national council cost £3,414; the federal council, £2,100; the federal chancery, £5,000; and the weekly federal service gazette, £673.

*Early history.*] When invaded by the Roman armies under Julius Cæsar, S. was inhabited by the *Figurini*, the *Rætii*, and other German tribes. Cæsar, in a narrative which still continues to be admired for its historical fidelity and elegance, has transmitted to posterity a circumstantial account of the subjugation of these tribes to the authority of Rome. *Helvetia* continued a Roman prov. until the empire was dissolved by the irruption of the Northern hordes. In 430 the Burgundians took possession of the southern and western districts between the Urso or Rous, the Rhone, and the ridge of the Jura; while the Alemanni conquered the northern and eastern parts between the Rhine and the Rhone. In consequence of these inroads and conquests, the language of the Swiss became blended with that of the German dialect of the Western Suabes; and the country received a new political constitution modelled upon that of the German nations. In 496, Clovis, king of France, conquered the Alemanni; and in 534 his sons subdued the Burgundians, and reduced Helvetia to a province of the Frankish empire. In the division of Charlemagne's empire in 843, the Burgundian part of Helvetia fell to the lot of Lothar, and the Alemannian part to that of Louis the German, who shortly afterwards united the Burgundian part also, under the name of Minor Burgundy, to his Helvetian territories. Upon the death of Charles le Gros, Rudolph of Stettlingen founded an independent kingdom of Minor Burgundy; but the Alemannian part of Helvetia continued subject to German sway, and was bestowed by the emperor on the duke of Zähringen, who afterwards annexed a part of Burgundy to his possessions. The Swiss mountaineers have ever been distinguished for their ardent love of liberty and free institutions. The peasantry began to form a fourth and independent class of the community in this country so early as the ages of the Crusades, and never afterwards relinquished their privileges as freemen; but the dukes of Zähringen, and the counts of Savoy, Kyburg, and Hapsburg or Habsburg, were the most powerful lords of the country at this period; and the personal influence of the nobility was greatly increased when, after the death of Berthold of Zähringen in 1218, Alemannia reverted to the German emperor. To protect themselves against the tyranny of the powerful nobility, the towns of Zurich, Berne, Basel, Soleure, Uri, Schwyz, and Unterwalden, which had purchased or received in donation their territorial rights from the German emperors, and called themselves 'towns' or 'counties of the empire,' united in a league of mutual defence, and destroyed the castle of several of the knights who had rendered themselves obnoxious by their robberies and oppression. But when, in addition to his own domains, Count Rudolph of Habsburg became liege lord of Kyburg also in 1264, the whole country was compelled to acknowledge the rule of so potent a chief. The ambition of his son and successor, Albrecht, however, excited the country to shake off its ignominious yoke. Albrecht wished to unite 'the forest towns,' as they were called, or the cantons of Schwyz, Uri, Zug, and Unterwalden, with his Austrian possessions; and on their refusal to renounce their allegiance to the German empire, he instructed his governors to harass the independent citizens by every means in their power. Driven almost to despair by the tyranny of their rulers, thirty-three brave and patriotic men, among whom were Fürst of Uri

and his son William Tell, Stauffacher of Schwyz, and Mechthald of Unterwalden, assembled on the Rütli, a meadow on the banks of the lake of Lucerne, on the night of the 7th of November 1307, and there solemnly swore to defend the ancient liberties of their country against Austrian oppression. The designs of these noble-minded men were somewhat prematurely revealed, by an incident familiar to every reader. The patriot Tell was present at the battle of Morgarten, and is said to have lost his life in 1350, during an inundation of the river Schachenbach. On the 1st of January 1308, the Swiss began one of the most gallant struggles for national independence which history records. The rising liberties of S. were protected, and the privileges of 'the forest towns' confirmed by Henry VII. Albrecht's successor in the German empire; but the house of Austria struggled hard to regain its ascendancy in this country. The victory, however, which the gallant Swiss obtained over the archduke Leopold, at Morgarten, on the 6th of December 1315, was followed by the confederacy of Brunn between the five 'ancient cantons,' as they came to be called, of Luzerne, Zurich, Glarus, Zug, and Berne. Shortly after this, *guilds* were established throughout the commercial cities of Europe, by which the common people and tradesmen obtained a share in the administration, which put an end to the oligarchy of noble families. The successive victories of Sempach, on the 9th of July 1286, and Nafels, on the 5th of April 1389, obtained an insecure peace for the Swiss, and foreign powers began to court alliance with the confederacy. On the 20th of August 1444, the Swiss fought a battle worthy of eternal fame, when the churchyard of St. Jacob, at Basle, became a second Thermopylae, by the gallant and effective stand which 1,000 Swiss made in it against a French army of 20,000 men, which Frederic III. had called into S. for the protection of his hereditary possession of Habsburg. They next excited the ambition of Charles the Bold of Burgundy whom they defeated at Granson, with the loss of 700 men; whereupon the confederates were joined by the duke of Lorraine and several of the Imperial towns. At Morat, 'the proud, the patriot field'—where the confederates, however, were superior in number—the duke was again defeated by 'the brotherly and civic band' with the loss of 8,000 men. Discouraged by these successive reverses, the duke, in a fit of desperation, gave battle again at Nancy, and was slain with most of his nobility. These successes emboldened the Swiss to assume the part of aggression; and in 1460 they seized upon Thurgau, then belonging to Austria. In 1481 the league was joined by the cantons of Friburg and Soleure; and shortly afterwards the confederates allied themselves with the Grisons, in opposition to the views of the emperor Maximilian I. who wished to force them to join the Suabian league. This circumstance gave rise to the Suabian war, which was terminated by the peace of Basle in 1499, after a struggle in which the Swiss gained no fewer than six successive victories over the German forces. The cantons of Basle and Schaffhausen joined the confederacy in 1501, and the canton of Appenzel in 1513. In 1512 the Swiss conquered the Valteline and Chiavenna, and also took from Milan the Italian balliwicks now forming the canton of Tessino. Having lost the battle of Marignano against Francis I. the confederates concluded a peace with France at Friburg, in 1516; and five years afterwards entered into an alliance with that country.

*The Reformation.*] About this period the doctrines of the Reformation began to be taught in S. Zuinglius, after having attacked various doctrines of the Catholic church, preached openly against the sale of indulgences in 1518; as Luther had already done in Germany the preceding year. The cantons of Zurich, Berne, Schaffhausen, Basle, St. Gall, Mühlhausen, and Bienne, embraced the new doctrines; and violent disputes arose betwixt the Protestant and Catholic cantons. In Glaris, Appenzel, and the Grisons, the people were divided between the two creeds; but the inhabitants of Lucerne, Uri, Schwyz, Unterwalden, Zug, Friburg, Soleure, Valais, and the Italian balliwicks, adhered to catholicism. Religious zeal soon degenerated into fanaticism; and the mutual hatred of parties kindled a civil war. A Protestant preacher had already suffered death in the flames at Schwyz, and the two parties were drawn up in hostile array against each other, when matters were accommodated by the interference of some of the more moderate leaders on both sides, in a treaty of peace in 1529; but the war soon broke out afresh. Geneva—which had been governed by a bishop and count from the middle ages, and had at last come under the house of Savoy—shook off its allegiance in 1534, and concluded an alliance with Berne and Friburg; while Calvin, who had come from France to Geneva, placed himself, by his talents and integrity, at the head of the reformation in S., and even for a while conducted the civil affairs of Geneva. Though Calvin differed in many points of doctrine from the great German reformer, the adversaries of the Protestant cause made no distinction betwixt their followers; nor was it till after the conference of Poissy, in 1561, when the adherents of Calvin rejected several articles in the confession of Augsburg, that the latter took the name of *Calvinists*. In 1531, Berne and Geneva concluded an alliance, and the former canton got possession of the Pays de Vaud, which was not, however, entirely ceded by Savoy till the peace of Lausanne in 1564. From this period until the recognition of the independence of the Swiss confederacy in the Westphalian peace of 1648, religious and political dissensions continued to agitate S.; aristocratical and democratical principles came into constant collision with each other; and the connexion between the confederated states and Germany became daily less intimate.

*Helvetic republic.*] It has been ludicrously said of S., that the



hand of Nature herself appears to have marked out that country for the citadel of Europe, where freedom might be safely lodged when driven from less secure regions. Unfortunately, the supineness or selfishness of her rulers was allowed to strip her of the enviable distinction she might otherwise have borne amid the nations of Europe. Geneva was the first of the cantons to catch the spirit of her Gallic neighbours; and the 'reign of terror' was established in this little republic in 1794. The inhabitants of the Pays de Vaud, irritated by the aristocratical government of Berne, cast themselves, in 1796, on French protection; their example was quickly followed by the inhabitants of the Valais, the Bormio, and Chiavenna, whom the Grisons had obstinately refused to admit to a community of civil and political rights, but whom Buonaparte received into the Cisalpine republic. After vain negotiation, the French army, under Brune and Schauburg, entered S. to the number of 40,000 men; and having defeated the Bernese on the 2d and 5th of March 1798, united Geneva to the French republic, and established a new constitution in S., under the name of the *Helvetic republic*. By this constitution the whole country was divided into 22 departments, each of which was to send 4 senators and 8 councillors to the general legislative assembly. The French Directory now determined, for the purpose of forwarding a vast plan of campaign against the allies, to take military possession of S.; and a series of brilliant military manoeuvres were executed on this theatre by the opposed forces of France and the allies. After the peace of Lunéville, the first consul invited the attendance of deputies from the aristocratical and democratical parties of the Helvetic republic at Paris, to whom he presented a new act of mediation, as it was called, on the 19th of February 1803. By this new constitution the republic was divided into 19 cantons; but in 1806, Neuchâtel was given to Prince Alexander Bérthier, one of Napoleon's generals; and in 1810, the Valais was incorporated with France. Such was the political situation of Switzerland when the allies entered it in December 1813, after the decisive battle of Leipzig. On the 8th of September 1814, a new act of confederacy was entered into at Zurich, by the 19 republics, which were joined on the 12th of the same month by the cantons of Geneva, the Valais, and Neuchâtel. The congress of Vienna, on the 20th of November 1815, recognized the perpetual neutrality of the Swiss cantons; but Austrian influence is nevertheless felt and acknowledged in every quarter of the confederacy. Placed between the rival powers of France and Austria, S. will ever be in great danger of being made the theatre of war in the contentions of these powers, her frontier of 50 leagues in extent offering a *point d'appui* to the movements of two armies; at present she owes her security to the mutual jealousies of the other states.

*Authorities.* Coxe's *Travels in Switzerland*, 3 vols. 8vo. 1781-1792.—Normann, *Geogr. statist. Darstellung des Schweizerlandes*. Hamburg, 1795-8, 4 vols. 8vo.—Pictet's *History of the Helvetic Confederacy*, 2 vols. 4to. 1800.—Körner *kurze Erdbeschreibung der Schweiz*. Winterthur, 1805, 8vo.—Usteri, *Handbuch der Schweiz. Staatsrechts*. Aarau, 1815, 8vo.—Geogr. *Darstellung der Schweiz in tabellarischer Form* Von Conr. Schoch, 1818, fol.—Simond's *Journal of a Tour and Residence in Switzerland*, 2 vols. 8vo. 1822.—C. F. Wieland, *milit. top. Chart. der Schweiz, in 24 sectionem*. Weimar, 1816-19.—*Charte von der Schweiz*. Zurich, 1815, bei Füßli.—Ebel's *Geognost. Chart.* Zurich, 1805.—*Bourring's Report on the Commerce and Manufactures of Switzerland*, 1836.—*Travels through the Alps of Savoy*. By Professor Forbes. Edin. 8vo.—For many years past, a general survey of S. has been going on. The general map of S. is to be in 25 sheets, surveyed on a scale of 1:500,000th, and engraved on half that scale. Some of the cantons, following the example of Geneva, have determined to have their own cantons separately engraved, but only on a scale of 1:500,000th.

**SWITZERLAND**, a county in the SE part of the state of Ohio, U. S., comprising an area of 216 sq. m., bounded on the E and S by the Ohio, and drained by Log, Lick, Indian, Plum, Briant's and Giant's creeks. The surface is diversified, but is generally fertile. Pop. in 1840, 9,920; in 1850, 12,932. Its capital is Vevay.—Also a township of Monroe co., in the state of Ohio. Pop. in 1840, 982.

**SWOJANOW**, or **SWOGANOW**, a town of Austria, in Bohemia, in the circle and 39 m. SE of Chrudim, near the Moravian frontier, on a small affluent of the Zwittanka. It has manufactories of woollen cloth and of fine cashmeres.

**SWORDS**, a rivulet of cos. Meath and Dublin, which rises in two head-streams, and runs  $7\frac{1}{2}$  m. E to the town of Swords in co. Dublin; and thence to a confluence with the Broadmeadow; and turning eastward, falls into the head of Malahide bay or estuary.—Also a parish and town in co. Dublin. Area of p., 9,674 acres. Pop. in 1831, 3,722; in 1851, 2,965.—The town stands on the Swords river,  $2\frac{1}{2}$  m. WNW of Malahide. Pop. in 1851, 1,294.

**SWOSGOWICE**, or **SWOSZOWICE**, a village of Austria, in Galicia, in the circle and 21 m. ENE of Wadowice, and 6 m. S of Krakow. In its vicinity are a mine of sulphur, and sulphureous springs.

**SWRALKA**, a town of Austria, in Bohemia, in the circle and 24 m. SSE of Chrudim, in a valley, on the l. bank of the Schwarza, by which it is separated from Moravia. Pop. 515.

**SWRIDSHI**, or **IWRIDSHI**, a province of Turkey, in the SE of Romania, consisting of a long range of heath-clad uplands, washed on the E by the sea of Marmora, and stretching in a SSW direction in the narrow peninsular elongation interposed between the Dardanelles on the E, and the gulf of Saros on the W. The river Erkenek to its confluence with the Maritza, and the latter river from that point to its embouchure in the Aegean, define this territory physically on the N and W. The whole tract of land bounded by the Maritza and the Erkenek, independent of the peninsula of Gallipoli, has an area of 2,400 sq. m., of which 1,600 sq. m. belong to the mountainous part, and about 800 sq. m. consist of plains,—the former is the more important in a military point of view. The tactical points which deserve particular mention are Enos, Ipsala, Dimotika, where the road from Salonica which runs along the W bank of the Maritza crosses this river; Dschif-Erkenek, Ayrobol, and Swendukla, where the road from Adrianople to Stamboul, leads across the Erkenek; Sarlar, Rodosto, Aynadshik, Malgara-Kesch-Rustoi; the mountain-heights of the Karadagh, and the Tekir-dagh, stretching from near the head of the gulf of Saros towards Rodosto; and the small neck of land on which Gallipoli is built. Upon these 1,600 sq. m., in the position already indicated, which cannot, if held by a power having command of the sea, be attacked in the rear, and in the flanks only with difficulty, because every such flank attack would probably be turned by the fleet, 60,000 to 70,000 men may in the opinion of some strategists successfully maintain themselves against 200,000. Hence the interest which attaches to this district in the present war with Russia.

**SWYDD-AND-CRAJG**, a township in the p. of Llandegley, Radnorshire, 2 m. SE of Pen-y-boët. Area 1,729 acres. Pop. in 1831, 217; in 1851, 3,329.

**SWYNAERDE**, a department and commune of Belgium, in the prov. of East Flanders, and arrond. of Ghent, watered by the Scheldt. Pop. of dep., 1,832. The village is 4 m. S of Ghent, near the l. bank of the Scheldt. It has considerable manufactories of printed muslins.

**SWYRE**, a parish in Dorsetshire, 5 m. ESE of Bridport, on the English channel. Area 1,146 acres. Pop. in 1831, 226; in 1851, 254.

**SYADABAD**, a fort of Afghanistan, 54 m. S of Cabul, on the E bank of an affluent of the Logurh.

**SYAGAFD**, a village of Afghanistan, in the valley of Ghorbund, 38 m. NW of Cabul.

**SYANG**, an island of the Asiatic archipelago, in the Gillolo passage, between the island of that name and Waygiou, in N lat.  $0^{\circ} 21' 10''$ , and E long.  $129^{\circ} 52' 20''$ .

**SYANT**, a lake of France, in the dep. of the Ain, cant. and 2 m. ENE of Nantua, in a narrow picturesque valley in the midst of lofty mountains. It is 2 m. in length from WSW to ENE; and receives on the N a small stream which forms a fine cascade, and discharges itself on the E into the Semine an affluent of the Valserine.

**SYBIL-HEAD**, or **CAPE-SYBIL**, a lofty and picturesque cape of co. Cork. It screens the N side of Ferriter's cove; and is situated  $2\frac{1}{2}$  m. SW of Dunourlin-head.

**SYCAMORE**, a village of De Kalb co., in the

state of Illinois, U.S., on the l. bank of the river of that name, and 157 m. NE of Springfield. Pop. in 1850, 975.—Also a township of Wyandott co., in the state of Ohio, 66 m. N by W of Columbus, drained by a branch of Sandusky river. It has a level surface, and is generally productive. Pop. in 1850, 880.—Also a township of Crawford co., in the same state. Pop. in 1850, 960.—Also a township of Hamilton co., in the same state, watered by Mill creek and its branches. Pop. 3,207.

SYCHTYN, or SAUGHTON, a township in the p. of Northop, co. of Flint, 4 m. W by N of Hawarden. Area 1,446 acres. Pop. in 1831, 421; in 1851, 224.

SYDASYR, or SEEDASEER, a town of Hindostan, in the presidency of Madras, and prov. of Malabar, 48 m. W of Seringapatam, near the r. bank of the Cavary. It is enclosed by a palisade. Tippoo Said was here defeated by the English in 1790.

SYDDAN, or SILDAN, a parish, containing a village of the same name, in co. Meath, 4 m. ESE of Nobber. Area 5,163 acres. Pop. in 1851, 1,092.

SYDENHAM, a chapelry in the p. of Lewisham, Kent, 8 m. SSE of London, intersected by the Croydon canal, and the South-eastern railway, which has a station here. S. attracted public notice in the early part of last century on account of its mineral springs, and in consequence in a short time rose from a cluster of cottages to the importance of a town. The air being salubrious, the scenery fine, and the distance from the metropolis trifling, numerous families of respectability have made it their permanent residence. The world-famous 'Crystal palace' has its site here, in the centre of what was once the famous Penge-wood. From the railway between the Sydenham and Anesley stations, its grounds stretch upwards over 280 acres of land, to Dulwich-wood, and the village of Norwood.—Also a parish in Oxfordshire,  $3\frac{1}{2}$  m. SE by S of Thame. Area 1,650 acres. Pop. 394.

SYDENHAM, an island of the South Pacific, in the Mulgrave archipelago, in S lat.  $33^{\circ} 20'$ , and E long.  $174^{\circ} 24'$ . It is 21 m. in length from N to S, crescent in form, and low and woody. It was discovered in 1809 by Capt. Bishop, and was subsequently visited by the French navigator Duperry.

SYDENHAM, a village of Upper Canada, in the township and  $14\frac{1}{2}$  m. from Toronto, on Dundas strait. Pop. 140.—Also a township of the Wellington district. Pop. 150.

SYDENHAM-DAMAREL, a parish in Devon,  $4\frac{1}{2}$  m. W by N of Tavistock, bounded on the W by the Tamar. Area 1,213 acres. Pop. in 1851, 464.

SYDERSTONE, a parish in Norfolk,  $6\frac{1}{2}$  m. S of Burnham-Westgate. Area 2,520 acres. Pop. 552.

SYDLING-ST.-NICHOLAS, a parish in Dorset,  $7\frac{1}{2}$  m. NW by N of Dorchester. Area 5,028 acres. Pop. in 1831, 617; in 1851, 675.

SYDLY, or SEEDLY, a fortress of Hindostan, in Nepal, in the district of Muckvanpur, near the l. bank of the Komlah, and at the foot of the Lama-Dagre mountains, 75 m. ESE of Katmandu. This place was taken by the English in 1761, but in consequence of the insalubrity of the climate they were soon obliged to evacuate it.

SYDNEY, the capital of New South Wales, finely situated on the S shore of Port Jackson, in S lat.  $33^{\circ} 52'$ , E long.  $151^{\circ} 14'$ , about 7 m. from the open sea, upon a small sandstone promontory which runs down into the bay, in numerous spurs of land or rock, between which lie several deep well-sheltered harbours in which vessels of the largest size may load or unload at the projecting wharves. Of these natural harbours the most important are Wulumulubay, Farm-cove, and Sydney-cove, on the E side of the peninsula; and Darling-harbour on the W. To

a person approaching the land from the eastward, the coast presents an apparently unbroken line of lofty, precipitous sandstone cliffs, along the base of which the waves of the vast Pacific dash fearfully when the wind blows strongly from the eastward, causing dense volumes of spray and whitish vapour to ascend to the summits of the highest cliffs. The entrance is seen at a considerable distance at sea, by the light-house, but no opening of any kind can be perceived till you come close in with the land. At a small distance from 'the Heads,' however, an opening is at length perceived in the iron-bound coast; and the idea you unavoidably form of it is, that the cliffs on either side have been violently rent asunder by some mighty convulsions of nature, to afford a passage for vessels into some place of security. The entrance at the Heads is about 1 m. wide; but the height of the cliffs and the idea of boundlessness which the ocean scenery has previously impressed upon the mind make it appear much narrower. On getting round Marble-head, a point of land stretching out from the southern side of the harbour, and completely concealing the opening from the eye of an observer at a few miles' distance at sea, the scene surpasses description. You immediately find yourself on the bosom of a large lake, extending to a great distance in a westerly direction, with innumerable coves or inlets stretching inland to the right and left; some presenting sandy beaches and grassy lawns; others lined with a barrier of gray rocks, cast in the most fantastic moulds, and surmounted in all directions with beautiful shrubbery. The town now appears built along the crests and flanks of two or three of the higher ridges, on which the houses rise in terraces from the water side to the summit. The older quarters of the town are narrow, crowded, and dirty; but some of the principal streets are very good, and well-paved, with carriage-ways 36 ft. wide, and foot-ways of 12 ft. George street and Pitt street present many handsome edifices, and some splendid shops. The houses are built either of brick, or of a fine sandstone which is procured on the spot. "On landing in S," says Colonel Davidson, "the traveller from India is ready to exclaim—'Surely this is not a town some 17,000 m. from England!' Everything reminds him of home. Here we have George street, Prince's street, King street, Pitt street, Hyde-Park, the Surrey-hills—all recalling by their appellations the mother-country." Hyde-Park, though it comes far short of its namesake in London, is nevertheless a very pleasant spot for a promenade, being nicely shaded by trees. 'Government Domain' is a piece of ground in the rear of the governor's house, reserved by government for a garden and pleasure grounds: it is tastefully laid out, and intersected with numerous walks, which are open to the public. The Surrey-hills are being fast covered with gentlemen's houses, for which a better situation could scarcely be chosen. Wulumulu, or Darlinghurst as it is now called, is the favourite suburb, and boasts of many handsome mansions, each with its garden. In 1852, there were in S. 5 Episcopalian, 3 Presbyterian, 6 Methodist, and 2 Roman Catholic chapels, in S., besides a Baptist, a Quaker, and an Independent chapel. There are several large and handsome banks, markets, and hotels. The new government-houses and buildings, the barracks, and a noble park called the domain, occupy the promontory between Wulumulu bay and Sydney cove; and the legislative chambers, and university buildings are large, handsome, and commodious. There are soap-manufactories, manufactories of tallow and sperm candles, foundries for casting either brass or iron, breweries for the manufacture of



beer, distilleries for the manufacture of gin, rope manufactories, tanneries, hat manufactories, woollen cloth works, numerous flour-mills, and snuff-mills; while the roads of the colony are traversed in every direction by coaches and vehicles of all descriptions built in S. Nearly all the mechanical arts that are in requisition in house-building and in the furnishing of houses, as well as in the building, equipment, and repairing of vessels, are successfully practised in S. There is a market held twice-a-week, in which all sorts of goods and produce are exposed for sale. The market for horses, sheep, cattle, pigs, grain, hay and straw, is held at the southern extremity of the town; the general market is situated somewhat nearer the harbour; and the large and commodious suite of buildings recently erected for the accommodation of the numerous frequenters of that busy scene not only forms an appropriate ornament to the town, but affords a large annual revenue to the government. Grain and dairy produce, eggs and poultry of all descriptions, potatoes, pumpkins, melons, apples, pears, peaches, apricots, oranges, lemons, loquats, grapes, figs, cherries, strawberries, native currants, with all the variety of vegetables cultivated in the mother-country, are procurable in their respective seasons in the S. market, at reasonable prices, and of superior quality. The total revenue of the city was, in 1852, £15,309. To the W of the town are the suburbs of Pyrmont and Balmain; on the SW, those of Camperdown, Newton, and the Glebe; on the SE are Paddington and the Surrey hills; and on the E, Henrietta-town. The country in the immediate neighbourhood of S., and for many miles inland, is sandy, barren, and dreary in aspect.

**Harbours and trade.** The Cove has deep water to within a few feet of the shore, and its wharfs allow the largest vessels to load or unload alongside. The circular wharf at the bottom of the Cove, and indeed the Cove itself, is appropriated to foreign merchantmen, whereas Darling-harbour has the steam-boat jetties and wharfs for coasting traders. Nearly a thousand vessels enter the port annually, many ships of large size are built in the colony, and there is a whole fleet of whalers belonging to Sydney owners; besides which, many Americans, and ships of other nations, put in here for supplies and repairs. Steam-boats constantly trade between the capital and the outports; and, periodically, large steam-vessels leave for Van Diemen's Land and New Zealand. Paramatta boats ply to and fro at all hours of the day; and great wool-drays are constantly arriving from the interior, laden with wool, the staple article of export, and with tallow. On the 1st of January, 1850, the port of S. possessed 27 steam-vessels, of which 17 might be called sea-going boats. These steamers comprised an aggregate of 5,633 tons, and of 1,942 horse-power. Of these, 11 were engaged in the Melbourne trade, 4 in the Newcastle and Hunter-river trade, 1 running to Wollongong, 1 to Moreton bay, 1 in the Clarence river trade, 1 in the New Zealand trade, 5 boats plying in the harbour of Port Jackson to the different suburbs, 2 steam-tugs, and 1 vessel laid up for sale. If we take the entries of repeated voyages of these steamers, we shall find that S. surpasses in the number and tonnage of steamers entering many of our principal ports, such as Falmouth, Yarmouth, Shields, or Carlisle. The returns relating to the trade of Port-Jackson and of Sydney, during 1853, give the value of the exports as under:

Goods exported from Port Jackson in British or colonial bottoms,	£2,294,548
Goods exported from Newcastle,	89,523
Moreton bay,	86,632

Goods exported from Twofold bay,	13,208
Port Jackson in foreign bottoms,	47,814
Gold exported,	1,781,172
	£4,312,897

The total amount of exports for 1852, was £4,604,034. In 1851, 1852, and 1853, the three chief exports stand thus:

GOLD.				
	ozs.	dwt.	grs.	Official value.
1851	144,120	17	16	£468,336
1852	818,751	18	17	2,660,946
1853	448,052	19	10	1,781,172

  

WOOL.		
	lbs.	
1851	15,268,473	£828,302
1852	11,086,974	676,815
1853	15,402,336	923,277

  

TALLOW.		
	cwts.	
1851	86,460	£114,168
1852	118,182	146,811
1853	71,324	113,361

The following were the chief articles of colonial produce shipped from S. and the outports, showing the quantity and value of each in 1853:

Wool,	16,477,869 lbs. value,	£1,005,546
Gold,	548,052 ozs. 19 dwt. 21 grs.,	1,781,172
Tallow,	4,533 tons 15 cwt.,	27,097
Coals,	51,501 tons,	81,078
Hides,	31,650 cwt.,	28,219
Sheep,	41,151,	15,732
Cedar,	2,945,883 ft.	
Horses,	907,	11,696
Horned Cattle,	6,425,	8,881
Hoofs, Horns, and Bones,	1,022 tons,	4,539
Wine,	4,263 gallons,	1,292
Cotton,	138 cwt.,	386

For further details relating to the commerce of S. see ARTICLES AUSTRALIA, under section NEW SOUTH WALES, and PORT-JACKSON.

**Population.** The pop. of S. in 1846 was 38,358; it now exceeds 90,000. The aborigines are now rarely seen on the streets or in the vicinity of S.

S. is 560 m. sailing-distance from Melbourne; 1,830 m. from King George's sound; 6,760 m. from the Cape of Good Hope; 13,120 m. from Liverpool; and 3,421 m. from Tahiti.

SYDNEY, a county of Nova Scotia, forming the most easterly part of the prov., and bounded on the N by Northumberland straits and George bay; on the E by the Gut of Canso, and Chedabinto bay; on the S by the Atlantic; and on the W by the counties of Halifax and Pictou. It is divided into two districts, distinguished as the Upper and Lower, and comprises 7 townships. Pop. in 1851, 13,467, in 1,947 families. The soil in the N and E is excellent, and the county generally is well-watered. In 1851, the quantity of grain raised in this co. was 34,304 bushels of wheat, 9,378 of barley, 5,897 of buckwheat, and 142,949 of oats. The interior is still to a great extent covered with forests. Manchester or Guysborough, situated on either side of the entrance of Milford Haven, is the chief place. The coasts form several fine harbours, and the fisheries are the finest in the prov.—Also a town of Cape Breton, of which it is the capital, built in 1785. It is situated on the E coast of the island, on the E branch of a bay named Spanish bay or Sydney harbour, and towards the embouchure of the Dartmouth. Pop. 500. It is enclosed by palisades, and contains the government house, and government stores, barracks, a court house, Episcopal, Roman Catholic, and dissenting churches, and about 60 streets. It is well and regularly built, and the surrounding district is finely cultivated. The harbour is one of the best and most commodious in the prov. It is 2 m. wide

at the entrance, and 4 m. above diverges into two extensive arms, on the E of which above 7 m. from the sea the town of S. stands. In the vicinity are extensive coal-mines.

**SYDONIA**, a village of Turkey in Asia, in Syria, in the pash. and 18 m. NE of Damascus, on the slope of a mountain, at the summit of which is a convent founded by Justinian. This convent is enclosed by lofty walls. Its inmates, about 30 in number, employ themselves in the culture of silk.

**SYDOW**, a village of Prussia, in the prov. of Pomerania, regency and 27 m. SE of Coslin, and circle of Schlawe. Pop. 300.

**SYDRA**. See **HYDRA**.

**SYEDAD**, a village of Beluchistan, in Cutch Gundava, 30 m. E of Gundava.

**SYENE**. See **ASSUAN**.

**SYENZO**, a large village of Nigritia, to the S of Bambarra, on the road which crosses the Ba-goe or White river, and 10 m. S of Tangrera.

**SYERSTONE**, a parish in Nottinghamshire, 5½ m. SW by S of Newark, bounded on the west by the Trent. Area 610 acres. Pop. in 1851, 241.

**SYHESVILLE**, a village of Carroll co., in the state of Maryland, U. S., on the N side of the W branch of Patapsco river, and on the Baltimore and Ohio railroad, 32 m. W by N of Baltimore.

**SYKE (ALT)**, a town of Hanover, capital of the bail. of Syke, in the upper county of Hoya, 12 m. S of Bremen. Pop. 560.

**SYKEHOUSE**, a chapelry in the p. of Fishlake, W. R. of Yorkshire, 4½ m. NW by W of Thorne. Area 3,220 acres. Pop. in 1831, 617; in 1851, 643.

**SYLA**, or **SAYLA**, a fortress of Hindostan, in the prov. of Gujarat, and district of Jallaver, 24 m. W of Simree, and a little to the NE of a large lake.

**SYLEHAM**, a parish in Suffolk, 3½ m. SW of Harleston, on the S bank of the Waveney. Area 1,603 acres. Pop. in 1831, 391; in 1851, 374.

**SYLHET**. See **SILHET**.

**SYLT**, **SILT**, or **SILD**, an island of the North sea, belonging to Denmark, 8 m. from the shore of the continent. It is administratively attached to the duchy of Sleswig, and diocese and bail. of Ribe, with the exception of the N part, which depends on Jutland, and bail. of Tondern. It is 25 m. in length from Cape Alblue-odde on the N, in N lat. 55° 03' 45", to Hornum-odde on the S, in N lat. 54° 44' 40"; and is 3 m. in width at the centre, comprising a total area of 43 sq. m. Pop. 2,600. In form it is extremely irregular, consisting of three narrow tongues of land, extending N, S, and E, attached near the centre, and distinguished by the names of Lyst, Rantum, and Morsum. The latter terminates in the Noes-odde. The W coast presents extensive downs. The peninsula of Lyst on the N forms a roadstead in which vessels of the line can sometimes find safe moorage. The soil of the island is partly marshy, and partly consists of solid and tolerably fertile compost; but wood and water are generally wanting. The inhabitants are good sailors, and find their chief employment in fishing and hunting aquatic birds. They manufacture also stockings and gloves. S. is noted for its oysters. It contains 5 villages.

**SYLT-FIELD**, or **SYLT-FIAELL**, a summit of the Dofrines, on the frontier of Sweden and Norway, between the prefecture of Jamtland and the diocese of Drontheim, and 48 m. SW of Åreskutan, in N lat. 63°, and E long. 12° 20'. It has an alt. of 6,098 Parisian ft. above sea-level.

**SYVA**, a river of Russia in Europe, in the gov. of Perm, which has its source near Krilova, in a ramification of the Ural mountains, in N lat. 57° 30', and E long. 59° 20'; runs first NW, then SW, and afterwards NV; passes Kounger; and after a

total course of about 300 m., throws itself into the Tchiounovaia, on the l. bank, at Liadova, and 21 m. NE of Perm. Its principal affluents are the Barda on the r., and on the l. the Iren and Babka.

**SYLVAIN (SAINT)**, a town of France, in the dep. of Calvados, cant. and 5 m. E of Bretteville-sur-l'Aize. Pop. 800.—Also a village in the dep. of the Maine-et-Loire, cant. and 5 m. NE of Angers. Pop. 1,228. It has quarries of slate.

**SYLVAN**, a township of Washtenau co., in the state of Michigan, U. S., 38 m. SE of Lansing, drained by the head waters of Huron river, and intersected by the Michigan central railroad. The surface is undulating, and the soil generally productive. Pop. in 1850, 984.

**SYLVANIA**, a township of Lucas co., in the state of Ohio, U. S., intersected by the Erie and Kalamazoo railroad, and 123 m. NNW of Columbus. Pop. in 1840, 426.

**SYLVESTER**, a township of Greene co., in the state of Wisconsin, U. S., 32 m. S of Madison, drained by a branch of Sugar creek. Pop. in 1850, 712.

**SYLVES**, or **SILVES**, a town of Brazil, in the prov. and 750 m. WSW of Para, in Guiana, on Lake Saraca, and near the l. bank of the Amazon. It is scantily peopled, but is well supplied with fish, and other provisions.

**SYLVESTRE (SAINT)**, a village of France, in the dep. of the Seine-Inférieure, cant. and 5 m. NE of Lillebonne. Pop. 150.—Also a village in the dep. of the Haute-Vienne, cant. and 8 m. SW of Lauriere, on a mountain. Pop. 1,400. In the vicinity is Mont Puy-de-Vieux, the loftiest summit in the dep., and in a dreary locality amid adjacent mountains was the famous abbey of Grammont, founded in 1164 by Etienne-de-Tiers, lord of Murat.

**SYLVESTRE-CAPPEL (SAINT)**, a commune of France, in the dep. of the Nord, cant. and 3 m. SSW of Steenwoorde. Pop. 1,139.

**SYMBRAS**, a small town of Brazil, in the prov. of Pernambuco. Pop. 600.

**SYME**, **SYMIA**, or **SANBEKE**, an island of the Mediterranean, off the SW coast of Turkey in Asia, in Anatolia, in the sanj. of Mentesha, at the entrance to the gulf of the same name, in N lat. 36° 34' 40", and E long. 27° 52'. It is separated from Cape Volno, the nearest point on the continent, by a space of only 4 m., and is nearly circular in form. It is about 6 m. in diameter, and consists chiefly of a mountain rising conically towards the centre. On its W coast is a town of the same name. The gulf of S.—the *Doridus* Cenis of the ancients—opening between Cape Krio, by which it is separated from the gulf of Kos on the N, and Cape Alepu on the S, is 30 m. in depth. The island is formed chiefly of an uniform mass of greyish-white compact scaglia, with bands and nodules of silicious limestone; but in one place a greenish sandstone conglomerate occurs. The S shore of the gulf is composed of the same limestone, containing nodules of flint. At the E extremity of the gulf, thin beds of limestone alternate with bands "of pale red jasper," the strata dipping 50° to the NW, but in some places they are curiously contorted.

**SYMMES**, a township of Hamilton co., in the state of Ohio, U. S., on the W side of Little Miami river. Pop. in 1840, 1,039.—Also a township of Lawrence co., in the same state, bordered on the E by Symmes creek. Pop. 472.

**SYMONDSBURY**, a parish in Dorsetshire, 1½ m. W by N of Bridport. Area 3,925 acres. Pop. 1,395.

**SYMPHORIEN (SAINT)**, a canton, commune, and town of France, in the dep. of the Gironde, and arrond. of Bazas. The cant. comprises 6 coms. Pop. in 1831, 5,388; in 1846, 5,601. The town is



15 m. W of Bazas, in the midst of a forest of firs, on an affluent of the Ciron. Pop. 1,685. It has a fine glass-work.—Also a commune in the dep. of the Indre-et-Loire, cant. and 1 m. N of Tours, of which it forms a suburb, and near the r. bank of the Loire. Pop. 1,365. It has manufactories of silk fabrics.—Also a village in the dep. of the Manche, cant. and 1 m. NW of La Haye-du-Puits. Pop. 430.

**SYMPHORIEN-SUR-COISE, or LE CHATEAU (SAINT)**, a canton, commune, and town of France, in the dep. of the Rhone, and arrond. of Lyon. The cant. comprises 10 coms. Pop. in 1831, 12,866; in 1846, 12,994. The town is 23 m. SW of Lyon, on the Orzon, a little above its confluence with the Coise. Pop. 1,790. It has manufactories of shoes, cloth, muslin, hats, and oil, and extensive tanneries. In the vicinity are quarries of fine stone.

**SYMPHORIEN-DE-LAY (SAINT)**, a canton, commune, and town of France, in the dep. of the Loire, and arrond. of Roanne. The cant. comprises 14 coms. Pop. in 1831, 20,404; in 1846, 21,208. The town is 10 m. SE of Roanne, on a height, near the l. bank of the Gaud. Pop. in 1846, 3,962. It has extensive manufactories of muslin, calico, brocade, several dye-works, cotton spinning-mills, &c.

**SYMPHORIEN-DU-MARMAGNE (SAINT)**, a commune of France, in the dep. of the Saone-et-Loire, cant. and 5 m. NNW of Montcenis, near the l. bank of the Mevrin, a small affluent of the Arroux. Pop. 1,462. It has manufactories of black dye from the wood of the chestnut.

**SYMPHORIEN-D'AZON (SAINT)**, a canton, commune, and town of France, in the dep. of the Isere, and arrond. of Vienne. The cant. comprises 12 coms. Pop. in 1831, 13,661; in 1846, 15,085. The town is 8 m. N of Vienne, on the Ozon. Pop. 1,544. It contains a castle, and has manufactories of blankets, tanneries, and bleach-fields.

**SYNABAD**, a village of Afghanistan, 200 m. WSW of Candahar, on the N bank of the Helmund.

**SYNABAD**, a village of Sind, about 3 m. from the E bank of the Indus, 23 m. N of Hyderabad.

**SYNDAN**, a village of Afghanistan, to the N of the Koh-i-Baba, and 96 m. WNW of Cabul.

**SYNGEL**, a commune of Belgium, in the prov. of Brabant and dep. of Lombeke. Pop. 138.—Also a com. in the prov. of E. Flanders and dep. of Sleydinge. Pop. 321.

**SYNGEM**, a department and commune of Belgium, in the prov. of E. Flanders and arrond. of Ghent, watered by the Schelde. Pop. of dep. 2,762. The village, which is one of great antiquity, is 11 m. SSW of Ghent, on a plateau. It has manufactories of linen.

**SYNGHOU**, a town of Burmah, in the prov. of Mramma, on the l. bank of the Irawaddy, 18 m. S of Pagahin-miou.

**SYNTHE (GRANDE and PETITE)**, two villages of France, in the dep. of the Nord and cant. of Dunkerque, and containing respectively 1,000 and 1,402 inhabitants. The latter has manufactories of sugar from beet-root, animal carbon, and ivory black.

**SYPra**, a river of Hindostan, in the prov. of Malwa, which has its source in the Vindhya mountains; runs NNW; passes Ougein; and after a course of 105 m., joins the Chumbul on the r. bank.

**SYRA**, an island of the Archipelago, in the N. Cyclades, to the SW of the island of Tino. Its highest summit is in N lat. 37° 28' 56", E long. 24° 55' 13". It is 11 m. in length from N to S, and 6 m. in breadth. The surface is mountainous, but the soil is productive and the climate mild. The principal productions of the island are corn, wine, honey, oil, cotton, and fruit. On the E coast is a bay which affords safe anchorage. During the war of independence

this island maintained neutrality, and became the refuge of Greek refugees, and the seat of an active commerce. It owes also much of its prosperity to its situation on the line of route from the W to Constantinople, Asia, and Egypt, and to its excellent port. Its pop. increased from 4,500 in 1825, to 40,000 in 1845. It forms with the islands of Milos, Siphnos, Kimolos, Pholegandros, and Sikinos, the diocese of the same name. The Syriotes are detested by the other Greeks on account of their neutrality in the war of independence. The sultan, in acknowledgment, besides preserving them from the hostility of the Turks, granted them the privilege of nominating a magistrate of their own. They profess Roman Catholicism.—The chief town, which bears the same name, is in the E part of the island, 81 m. SE of Athens. It rises amphitheatrically on a mountain, which extends to the entrance to the port. The streets are tolerably broad and well-kept, and the houses are well built. It is the seat of a Catholic bishop, and of the Greek bishop of the Cyclades, and contains numerous churches, a gymnasium, good private schools, a custom-house, three printing establishments, and extensive building-shops. The harbour is safe and capacious, and has an active entrepot trade in silk, coffee, and prints. From the port, filled with vessels of all sizes, the visitor beholds, to the left, the old town on a steep hill, and the new town, now called Her-mopolis, having a pop. of more than 20,000, extending itself like an amphitheatre along the declivity, at the foot of the same hill and two or three others. Several considerable edifices are discerned, not only churches and other public institutions, but also private dwellings, scattered here and there, which, being altogether or in part of white marble and plaster, form a pleasing effect against the brownish hills. The principal commercial street is level, tolerably straight, and paved with flag stones. Near to this street is a large irregular square, partly planted with trees, and having in its centre a triumphal arch.

**SYRA**, a district of Japan, in the island of Nippon, and prov. of Mōtsu.

**SYRACO**, a town of Turkey in Europe, in Albania, in the sanj, and 12 m. SE of Janina, on an affluent of the Mezzovo.

**SYRACUSE**, a city and port on the SE coast of Sicily, in N lat. 37° 5', E long. 15° 16', the capital of an intendency or administrative division of the same name. It stands on the island or isolated promontory of Ortigia, and occupies part of the site of the ancient *Syracusa*. It is strongly fortified, and has 16,000 inhabitants. Its principal edifice is the cathedral; it has also a senate-house, a college, and a range of barracks. Its chief trade consists in exporting corn, oil, wine, fruit, and saltpetre. Near the castle is the famous fountain of Arethusa. In the neighbourhood is the river Lyane, in which the papyrus, here called *parocca*, still grows. Among the most remarkable ruins of ancient Syracuse are the *latomie* or state-prisons, the baths, the amphitheatre, the ear of Dionysius, and the theatre. The ancient Syracuse was founded by the Corinthians in B. C. 732. The Roman general Marcellus conquered the city, in B. C. 212, after a defence of nearly three years under the celebrated Archimedes. In the time of its splendour, it was so powerful, that its tyrant, Dionysius, supported a force of 10,000 cavalry, 100,000 infantry, and 400 ships-of-war. The memory of Archimedes is still venerated here. The walls of the conversazioni room are covered with pictures of his mechanical exploits. About 100 yds. from the spot traditionally remembered as the place of the Agragian gate, stands his tomb, excavated

from a native bed of rock, the face of which, naturally projecting, is shaped about the opening into a rude Doric front, with pilasters and a pediment. The fountain of Arethusa, celebrated from remote antiquity, has other pretensions to consideration than the attraction which it owes to the muse. "It is a wonderful fountain in itself, gushing up with great copiousness near the sea, and forming a respectable rivulet from its very source. It rises in a grotto naturally arched with a firm roof of stone, so strong that the outer street of the city, a sort of boulevard, is carried directly over it. The spot is not farther from the sea, in a straight line, than 12 or 14 yds. The current pours over a rocky ledge into a circular pool, whence it issues by a winding course, tumbling and foaming as it goes, till reaching the sea-wall, when it leaps headlong into the briny deep. It is a curious fact that another copious spring rises from the bottom of the harbour, at some distance from the shore, with so much force that the water retains its freshness almost to the very surface." Dionysius' Ear is an immense cavern, 150 ft. high, and 300 ft. long. On the upper extreme end of it is a very small aperture, where the least sound made in the interior is distinctly heard—a whisper, the tearing of a bit of paper, or any thing creating sound, in the most minute manner, come distinctly to the ear.

**SYRACUSE**, a town of Salina township, capital of Onondaga co., in the state of New York, U. S., on the E bank of Onondaga creek, near its entrance into a lake of that name, and 130 m. N by W (direct) from Albany. The advantages of its position render it the centre of an extensive home trade, and it is also noted for its salt works, which in 1850 produced a total aggregate of 1,184,928 bushels. It is situated on the Erie and the Oswego canals, the Syracuse and Utica, the Rochester and Syracuse, the Rochester and Syracuse Direct, the Oswego and Syracuse, and the Syracuse and Binghamton railroads. Pop. in 1830, 2,565; in 1840, 6,502; in 1850, 22,271.

**SYR-BENI-YAS**, an island of the Persian gulf, to the ESE of Dalmy island, and near the coast of Arabia, from which it is separated by a narrow channel navigable only by the small vessels engaged in the pearl fisheries, in N lat. 24° 34', and E long. 52° 40'. It rises abruptly towards the centre, and terminates on the SW in a sandy promontory. The W coast is low, and is bordered by several small islets.

**SYR-DERIA**. See **SIR**.

**SYRE-GRUND**, a reef of the North sea, near the SW coast of Norway, in N lat. 58° 15', and E long. 6° 8'.

**SYRESHAM**, a parish in Northamptonshire, 5 m. NE of Brackley. Area 4,060 acres. Pop. 1,027.

**SYRIA**, a region of Asia, politically belonging to Turkey, bounded on the N by the Taurus range; on the NE by the Euphrates; on the E by the desert of Syria, now reckoned part of Arabia; on the S by a line drawn, from the S extremity of the Dead sea, due W to the mouth of the Rhinocolura; and on the W by the Mediterranean. In ancient geography Syria, besides Syria Proper, included Phœnicia and Palestine, and, according to Pliny, Mesopotamia and Babylonia also. The Arabs denominate Syria Belad-el-Sham, 'the country on the left, or north,' in contradistinction to Yemen, 'the south, or right.' These denominations refer to the relative position of Mecca, and proceed on the notion that S. is part of Arabia. The general outline of this region presents the figure of a trapezium, lying between the parallels of 36° 45', and 30° 57'. Its frontier on the E runs from Zelehi, in N lat. 39° 50',

along the valley of Tadmor, and SW to the Nile which separates it from the African continent.

*Political divisions.* The following were the political divisions of this region, before its virtual conquest by Ibrahim, at the head of Mehemet Ali's forces, betwixt 1831 and 1833:

Pashalics.	Ancient divisions.
1. Aleppo.	Cyrrhestica, Chalcidene, Seleucia, and the district of Antioch.
2. Tarabulus or Tripoli.	Casiotis and Northern Phœnicia.
3. Sidon or Saïde, and Acre.	Southern Phœnicia, part of Coelosyria, and Galilee.
4. Damascus.	Apamæne, Palmyrene, Eastern Coelosyria and the remainder of Palestine.

The whole territory comprised in the four pashalics, contains, according to Malte Brun, a superficies of 51,778 sq. m., exclusive of the desert. Captain Chesney estimates its superficies, with the addition of the musellimik of Cyprus, at 53,762 sq. geog. m. Though Commagene always made a part of S. with the Greek and Roman geographers, and though Malte Brun, in conformity to established custom, has reckoned Commagene a part of S. in his table, yet it makes no part of the present political arrangement of S., but is included in the pashalic of Marash.

*Physical aspect.* Syria is a varied country of mountains, valleys, and plains. Its coasts are in a few places low and sandy, but generally bold, lofty, and deeply indented. The chief mountain-ranges are those which on the N separate it from the district of Commagene; those which separate it from the valley of El-Bostan; and those which separate it from the ancient Cilicia on the NW. These ranges are all spurs from the great Taurian range. Mount Rhoms, a prolongation of Mount Amanus, terminates at the valley of the Orontes, and has an alt. of 5,550 ft. above the level of the sea. But the Syrian chain properly commences at Mount Casius, a huge peak to the S of Antioch, which shoots up its needle-like point encircled with forests. From this point the same chain, under various appellations, stretches along the shore of the Mediterranean, from which it is seldom more than 24 m. distant. At the head of the valley of Baalbec, this chain becomes connected with the eastern chain by a lateral range shutting up the valley. This eastern range, divided from the Lebanon range by the valley of Baalbec, was called *Anti-Libanus* by the Greeks, from its running in a parallel direction with and opposite to it: this appellation is, however, unknown to the natives, and being somewhat arbitrarily used by the ancients, has given rise to much learned and useless discussion. At the head of the valley of Baalbec the proper Lebanon terminates; but the other range with which it is connected running N, under the modern name of the Ansarian mountains, separates the basin of the Orontes from the coast. From the source of the Jordan to the valley of the Orontes, the chain runs more than 200 m. N; whilst, in a contrary direction, the two branches of the main range extend upwards of 50 m. each. The highest part of the range is the Jebel-el-Sheikh or 'mountain of the Sheik,' called Jebel-el-Talg or 'the Snowy mountain' by Abulfeda, which, according to Buckhardt, lies due W of Damascus. The predominant constituent of this range is calcareous rock, whitish, hard, and ringing when struck. Granite hardly appears till we arrive at the vicinity of Mount Sinai and the Red sea. About the parallel of 34°, the chain divides into two ranges, the eastern and the western, which enclose between them the long narrow valley of El-Bekaa, or Hollow Syria. The western branch terminates near the coast, S of Sidon, while the eastern branch, in nearly



the same parallel, divides again into two ridges, one of which passes into Arabia along the E side of the valley of the Jordan, the other runs southward, along the W side of the Jordan, forming the watershed between the basin of the Dead sea and the valleys that send their waters to the Mediterranean, and covering the interior of Judea with a wilderness of barren mountains. Mount Carmel forms a bold promontory on the SW side of the bay of Acre, and has an extension SE until it joins the mountains of Judea. Further to the S, these mountains connect with the rocky chain of Arabia Petraea, and fill up the space between the gulf of Suez and the gulf of Akaba. The diverging range of the Libanus, which forms the NE part of the valley of the Upper Jordan, was the Hermon of Scripture; and further south were the Mountains of Gilead. These mountain-ranges form a number of valleys. El-Ghab, or the valley of the Orontes, lies between the Nosairi mountains on the W, and the Jebel-Shaehsabou on the NE. It is inhabited by a mongrel race of Arabs and Fellahs, who in winter live in the few villages scattered over it, and in summer retire with their flocks to the mountains, to seek for pasturage and avoid the swarms of flies and venomous reptiles of the valley. El-Bekaa, the Cœlo-Syria of the Latins, is a beautiful valley between the two branches of Lebanon, drained by the river Leitani. It is about 90 m. in length by 11 m. in average breadth, and is the richest and most beautiful part of S. The valley of the Jordan is about 175 m. in length, and extends from the sources of that river to the extremity of the Dead sea. El-Ghor and the plain of Jericho are dependencies of this valley. The whole is considerably below the level of the Mediterranean. The valleys of Galilee are generally small, but beautifully wooded; and between Galilee and the ridge of Mount Carmel lies the great plain of Esdraelon, watered by the river Kishon. It is called in Scripture the valley of Jezreel and Megiddo; and is exceedingly fertile, and well-adapted for corn growing, but it is uncultivated, and only affords a rich pasture for a few scattered herds. The plain of Hauran lies to the S of Damascus, between Hermon and Gilead and the Jebel Hauran. It is famous for its wheat, and contains many scattered hummocks, which are the sites of villages. The plain is inhabited by Druses, Turks, and Arabs, and is also visited in early spring and summer by the Bedouins. The rocky wilderness, 'El-Ledja,' and the Jebel-Hauran, comprehend all the uneven country which extends along the eastern side of the plain of Hauran, from near Damascus to Bozra, and is supposed to be the ancient *Trachonitis*. The plain of Hauran itself is the ancient *Auranitis*. The great Syrian Desert and its borders are not a bare wide waste of sand, but somewhat resemble the prairies of the western United States or the llanos of South America. Its surface consists generally of a fine black soil overgrown with tall coarse grass, and inhabited by antelopes, wild asses, and boars. In summer, however, the herbage is burnt up, and the animals are obliged to betake themselves to the borders of the cultivated country. The whole of the Syrian mountains in all their ramifications are limestone, except in the Hauran, where black porous basalt is the predominating rock. Near Damascus are immense caverns, one of which can contain 4,000 men. The mountain elevations of Lebanon and the Anti-Lebanon are older than those in Southern Syria: the former belonging to the chalk formation, but the latter to the tertiary deposits. This fact seems to correspond perfectly with the physical characters of the surface.

*Rivers.*] In the N part of this region is the long

valley watered by the Orontes; in the S, that watered by the Jordan, and the hollow tract containing the Dead sea; in the eastern division is the delightful vale of Damascus. The chief rivers are the Orontes and the Jordan, running in opposite directions, the other streams being generally mere torrents from the mountains, of short and rapid courses. The Orontes, though having a course of more than 200 Ch. direct distance, is but a small river, and would be dry in summer but for the numerous dams erected here and there to preserve its waters. It rises on the W slopes of the Anti-Libanus in about N lat. 34° 5'. Its great northern branch, the Lower Kara-su, is a larger stream than itself, and conveys to it the waters of the Aga-Denghiz lake.—The Nahr-el-Litani, or *Leontes*, issues from a small lake 6 m. SW of Baalbec, and forcing its way through the Lebanon chain, flows into the sea 5 m. N of Tyre.—The Urdan or Jordan, is a much more rapid and considerable stream than the Orontes. Its most northern branch rises at the W foot of the Jebel-es-Sheikh, and passes through the Bahr-el-Huleh. Its whole course is not above 130 m. to the Dead sea, but it receives a number of large streams on both sides, especially from the Jebel-Hauran. See articles JORDAN and ORONTES.—The chief lakes in Syria proper are those of the Bahr-el-Kades, and Apamea in the upper basin of the Orontes, and the lake of Antioch. In the highest valley of the Anti-Libanus is the small lake of Lemone; and in the district of Damascus is the Nahr-el-Marj, or 'Lake of the Meadows,' in which the numerous streams, irrigating the celebrated plain of that city, are lost; but the chief of all the lakes in this region is that of Asphaltites, commonly called the DEAD SEA. See that article. This lake is upwards of 1,300 ft. below the level of the Mediterranean—a fact which, although known, has not yet been satisfactorily accounted for. Captain Allen has come to the conclusion that the gulf of Akaba, on the NE point of the Red sea, was at some distant period connected with the Dead sea, although the channel is now filled up, either by a gradual upheaving of the land, by the growth of coral, by deposit of sand and gravel thrown up by the sea, or by the sand of the desert. The tract of country between the gulf of Akaba and the Dead sea does not seem as yet to have been satisfactorily surveyed, but Captain Allen concludes that the Dead sea was also originally connected with the Mediterranean, the lake of Tiberias being one of the links of the chain, and that by evaporation the intervening district was dried, and by upheavings or otherwise barriers made, which have now divided what might have been an unbroken sea into a series of lakes.

*Climate.*] In a region so diversified as S., there must be much diversity both of climate and produce. According to Volney, this region has three climates,—that of the mountains, that of the plains, and that of the coast. The summits of the snowy Lebanon diffuse a salubrious coolness, whilst that of the coast is hot and humid, and the adjoining plains of the Syrian desert are subjected to a dry and scorching heat. The seasons and the productions consequently vary. In the mountains, the order of the former is similar to that of the middle of France: the winter lasting from November to March, sharp and rigorous. No year passes without snow in the mountains and valleys, and the ground is often covered with it several feet deep for whole months. The spring and autumn are agreeable, and the summer heats moderate. In the plains, on the contrary, when the vernal equinox has passed, a sudden transition takes place to overpowering heat which lasts till October. There is no gradual transition, as with us, from winter to spring, and from

the latter to summer, but the summer commences, as it were, instantaneously; but, on the other hand, so temperate is the winter that orange-trees, dates, bananas, and other delicate fruits, grow freely in the open field.

*Agricultural produce.*] If S. was under an enlightened system of government, and art and industry, secure of protection and remuneration, might here duly second the advantages of nature, no country on the globe would be more productive of vegetable wealth than it. "The agricultural produce of S.," says Dr. Bowring, "is far less than might be expected from the extensive tracts of fertile lands and the favourable character of the climate. In the districts where hands are found to cultivate the fields, production is large, and the return for capital is considerable; but the want of population for the purposes of cultivation is most deplorable. Regions of the highest fertility remain fallow, and the traveller passes over continuous leagues of the richest soil, which is wholly unproductive to man. Nay, towns surrounded by lands capable of the most successful cultivation, are often compelled to import corn for the daily consumption; as is the case at Antioch, in whose immediate neighbourhood the fine lands on the borders of the Orontes might furnish food for hundreds of thousands of inhabitants. But men crowd into towns for protection and security, and leave the rural districts without labourers to sow or to reap the harvest." The tenure of land in Syria is said to be well ascertained, and the holdings carefully registered. Certain tracts belonging to the Sultan, are annually farmed by auction. Entails are common. "The soil of all the plain through which we passed," says Dr. Robinson, "is good; as is proved by the abundant crops of grain we saw upon it. The whole of this vast level tract is the property of the government, and not of the inhabitants. Whoever will, may cultivate it, and may plough it in any place not already pre-occupied. But for every two yoke of oxen thus employed in tillage, he must pay to the government seven ardebs of wheat and eight ardebs of barley. The peasants when rich enough to own oxen, plough and sow on their own account; but they frequently are the partners of merchants and others in the cities. The merchant furnishes the oxen, and the fellah does the work; while the expenses and income are divided equally between them. In like manner, as we learned, the greater portion of all the rich plains of Palestine and Syria are in the hands of the government; while the hill-country and mountains are held in fee-simple, or nearly so by the inhabitants. It results from this state of things, that the inhabitants of the hills and mountains are far better off than those of the plains; they raise a greater variety of crops, and have an abundance of all kinds of fruit; while those of the plains are in general poor, and are compelled to cultivate only grain, in order to satisfy the rapacity of the government. Hence, while the rocky and apparently almost desert mountains teem with an active, thrifty, and comparatively independent population, and the hand of industry is everywhere visible; the rich and fertile plains, deserted of inhabitants or sprinkled here and there with straggling villages, are left to run to waste, or are at the most half tilled by the unwilling labours of a race of serfs." Besides wheat, rye, barley, beans, and the cotton-plant, which are everywhere cultivated, different districts have vegetable productions peculiar to themselves: as sesamum and dhoura in Palestine, maize in the light soil of Bualbec, and rice in the marshy district of Houle. Sugar-canes have lately been introduced into the gardens of Saide and Beyrut, and equal those of the Egyptian Delta. Indigo

grows spontaneously on the banks of the Jordan, in the country of Bashan, and only requires a little care to cause it acquire a good quality. Tobacco is produced in the hills of Latakia, and creates a commercial intercourse with Damietta and Cairo. At present this plant is cultivated in all the mountains. As for trees, independent of the cedar and the cypress, the olive grows at Antioch and Ramla to the height of an oak. The white mulberry forms the wealth of the country of the Druses, by the beautiful silks which are obtained from it. The red and white wines of Lebanon rival those of Bordeaux. Lemons and water-melons of superior quality are the boast of Jaffa; the oranges of Tripoli equal those of Malta; the figs of Beyrut are not inferior to those of Marseilles, while its bananas rival those of St. Domingo; Aleppo is unequalled for pistachio nuts; and all the fruits of Europe are, as it were, combined in the fertile vale of Damascus; Niebuhr thinks that the famed Arabian coffee-plant might also be cultivated in Palestine. In 1837, Ibrahim Pasha forced an increased cultivation throughout Syria, and the inhabitants of the different towns were obliged to take upon themselves the agricultural charge of every spot of land susceptible of improvement. He himself set the example, and embarked a large sum in such enterprises: the officers of the army, down to the majors, were forced also to adventure in similar undertakings. The result was, however, extremely unfortunate, from the want of the usual periodical rains, which caused the failing of the crops generally in Syria, and in most cases a total loss of capital ensued. Mr. Werry says, a considerable extension of the plantation of the mulberry, and olive-tree, and vines, took place at Tripoli, Latakia, and to the south, and in fact in every place susceptible of their culture. It was the intention of Ibrahim and of the government in Egypt, by the increased cultivation, principally of wheat and barley, to render S. independent of supplies from without, and, if possible, to obtain a superabundance to become an article of export. In the time of abundant crops S. generally produced, chiefly in the south, sufficient for its own consumption; and the north, when in want, usually received supplies from the country surrounding Orfa, across the Euphrates. The productive plains of the Adana district also supplied Syria.

*Animal productions.* All our domestic animals, besides the buffalo and the camel, exist in Syria. For deer, it has the gazelle; and, in place of wolves, it has the jackal, the hyæna, and the ounce, which last has been mistaken for the tiger. Lions and bears once frequented the thickets of the Jordan, and are still occasionally seen in the mountain-districts of Aleppo and Northern Syria. The tiger, lynx, leopard, bear, hyæna, wolf, jerboa, stag, and gazelle occur in Northern Syria; and the crocodile, the beaver, and the otter, are occasionally seen in the Euphrates. The ornithology of S. embraces the vulture, stork, pelican, falcons of various species, owls, snipes, bustards, and locust-eaters. The entomology of S. is rich. Serpents and vipers are numerous, scorpions, centipedes, tarantulas, lizards, hornets, and wasps occur; but of all the insect-tribes, the locust is the most formidable. These insects are usually generated during an uncommonly mild winter, in the Syrian and Arabian deserts; from thence they take their flight to the plains of Syria, where they devour every species of vegetable life, grass, foliage, and every green thing, leaving the ground bare and desert. Their approach causes universal terror, and their visit is followed by certain famine.

*Minerals.*] Iron is abundant in the Kesruan



Coal is worked near Beirut. Silver, quicksilver, bitumen, and iron have been found in the Anti-Libanus.

*Commerce.* Generally speaking, the roads of S. are in a deplorable condition; in the rainy season, indeed, travelling is almost impossible. Wheel-carriages, of course, cannot be employed; camels and mules are ordinarily used for the transport of goods, and are hired at from 12 to 15 piastres per day—about 2s. 6d. or 3s. The camel carries a heavier burden, but, his pace being slower than that of the mule, the ultimate cost is about the same in both instances. The harbours of Jaffa, Tur (Tyre), and Saida (Sidon), which existed in ancient times, are now all choked up, and offer no security to shipping; even such ports as Tripoli and Latakia have ceased to be frequented. Beyrut (the ancient *Berytus*) and Scanderun, or *Alexandretta*, are now the two principal harbours of export and import; the first providing for the supply of Damascus and Palestine; the other for that of Antioch, Aleppo, and Northern Syria. The exports of S., as compared with the imports, are very limited. The principal production is silk, of which a small portion is consumed in the country, and the remainder exported. As this is an article of very expensive production, and rarely produces a profit proportionable to the labour and risk of cultivation, it is natural to suppose that the new duty of 12 per cent. imposed upon it will be the cause of loss to the grower, who cannot be remunerated by the price it yields. The cultivation of silk in Europe having been greatly extended, the inferior qualities of Syrian silk are neglected by consumers, who now only buy them at a heavy reduction on former prices. The silks of S. now pay an export duty of 12 per cent. in lieu of  $\frac{1}{2}$  per cent., as formerly paid, which in an equal proportion will diminish the resources of the country in paying for its imports, or, in other words, have a restrictive influence on its foreign commerce, particularly with Great Britain. These remarks do not apply to silk alone, but equally to all articles of Syrian production and export. S. has latterly furnished grain only sufficient for its consumption during a portion of the year, and is consequently forced to have recourse to importation from other countries for the means of subsistence. This article can be paid for only in cash, and, being charged with an exorbitant duty, is another heavy drain on the resources of the country, which is greatly augmented by the unjust and ruinous duties levied upon grain transported from one part of Syria to another. Lebanon is not like the Alps or Pyrenees, covered with verdure, periodically renewed by refreshing showers. It has little soil, little pasturage, and almost the sole resource of the inhabitants is silk. They are clothed in silk, and in travelling through the mountains, if you ask what is the income of such and such a sheikh, the answer is, 'so many rotali of silk; consequently, there is no deceiving them on this question; it comes home to every man's door. The raw material is produced in the mountain, and manufactured in the cities of Damascus and Aleppo.

*Population.* In proportion to its extent, no country on earth presents so motley a population as S. One cause of this may be found in the frequent revolutions which it has undergone, having been successively invaded and conquered by the Assyrians, Babylonians, Persians, Macedonians, Romans, Arabs, Turks, Crusaders, Mamelukes, and the Osmanlis, to whom it is nominally subject. The aboriginal natives, the descendants of Aram, amalgamated with the Greeks—form but a small portion of the present inhabitants, which are a

mixed assemblage of Turks, Kurds, Turcomans, Arabs, Jews, and the numerous tribes that exist in the mountains and valleys of both the Lebanons and the mountains of the Hauran. To state the amount of such a mongrel population is impossible, as we have no precise data on the subject: we only know that it is not a tithe of what S. might support, and probably of what it once contained. Its conjectural number does not exceed 2,000,000 at most; but each traveller assigns it a number widely different from that of his predecessors. M. de Salle, by combining the results obtained by preceding travellers, arrives at an average of 1,500,000 for the pop. of S., which he distributes in the following manner:

Turks,	10,000
Mussulmans, Arabs, Syrians,	400,000
Eastern tribes of the Anti-Lebanon and left bank of the Jordan,	50,000
Metwallis, or Mitwallies,	100,000
Ausaries, or Ausarians,	60,000
Kurds and Turcomans,	15,000
Druses,	300,000
Jews,	20,000
Maronites,	400,000
Catholics, Greeks, Syrians, Armenians,	50,000
Schismatic Catholics,	80,000
Floating population of merchants and pilgrims,	40,000
	1,525,000

Moore estimates the pop. at 2,000,000; Colonel Campbell at 1,864,000; Farren at 1,000,000; and Colonel Chesney at 1,454,000. The total surface of S. is about equal to that of Naples, the Papal States, and Tuscany; the pop. of which amounts to 9,000,000. At the time of the Arabian conquest the pop. of S. exceeded 6,000,000; and, judging by the importance of their towns, the influence of their emirs, and the resistance which they opposed to the Christians, the Syrians must still have been a numerous nation during the crusades.

*Language.* The languages spoken in this country are as diversified as the population. The old Syriac is spoken only in a few districts in the vicinity of Damascus and Mount Lebanon; and the Samaritans of Sichem, like the Jews, have forgotten their old language, which is only preserved in their copy of the Pentateuch. The Arabic predominates both in the country and in the towns; and a corrupted mixture of Syriac and Chaldee, called the Nabathean language, is spoken by the peasantry. Turkish is spoken in many of the towns and cities, whilst both it and Kurdish are spoken in the camps of the wandering Turcomans and Kurds in the pashalic of Aleppo.

*Religious sects.* No country presents to the observer such a medley of hostile and opposite creeds as Syria. The two prevailing systems are the Mahommedan and the Christian; but each of these is split into a variety of sects which hate each other as heartily as Mahommedans and Christians do each other. The Mutualis, the Druses, the Ausarians, and Ismaelians, are all heretical Mussulman sects, detested by, and equally detesting the Sunni Mussulmans.—The Mutualis are the followers of Ali, whom they regard with idolatrous veneration. This tribe inhabited the great valley which divides the two Lebanons, and were so powerful during the days of Sheik Daher, that they could bring 10,000 horsemen to the field; but, by their own ceaseless intestine discord, and the cunning of Djezzar Pasha, of Acre, their power has been annihilated; and driven from their native soil, as they now are, to the rugged summits of the Anti-Libanus, they are on the eve of total extermination, and the extinction of their very name.—The Druses live to the S. of the Maronites, on the Western Lebanon, and are estimated at 120,000. It is impossible precisely to state their religious creed, as they have taken all possible precautions to conceal their most obnoxious tenets.—The Ausarians and Ismaelians are said to have originated in the 7th cent. They are a sort of Sufis or Mystical Mussulmans, and are the representatives of the famous Assassins mentioned in the history of the crusades.—The Christians are divided into the Melchites or Royalists, Jacobites or Monophysites, Armenians Nestorians, Maronites, and Latins or Western Catholics. Of these the Melchites are the most numerous. The Jacobites are also numerous. The Maronites are estimated at above 120,000 in number. Whilst the Ausarians inhabit the coast and slope of the mountains, from Antioch to the Nahr-el-Kebir, the Mar-

nites extend southward from the latter stream to the Nahr-el-Kelb. Their territory is the Kesrawan, or Castravan of the crusade historians. According to a census taken in 1784, the number of men able to carry arms was 35,000, which implies a pop. of 140,000 souls. Mr. Connor, however, states—apparently on information procured from their patriarch at Canobin in 1820—the whole Maronite pop. at only 80,000. Though dependent on the Romish church, their clergy have still the liberty of electing a spiritual head out of their own number, who is entitled the *batrack* or patriarch of Antioch. In their services the gospel only is read aloud in Arabic, that the people may hear it; but the mass is performed in Syriac, of which dialect the greater part understand not a word.—In every commercial town of Syria and Palestine, a certain number of Jews are always to be found; and they form the greater part of the population of Jerusalem and of Tiberiade.

*Jewish population.* The Jews in Syria may be divided into two classes,—the settled and the wanderers. The first are perfectly similar to the common type, while the latter present material differences from it. The Samaritans have disappeared even from Jaffa and Zidda, where a certain number were still existing at the beginning of this century; Napluse is now the only place where they are to be found, and of which they inhabit the more elevated districts. This sect intermarry only among themselves, and are therefore all related. By their own statement, their family consists of 200 individuals, but it is affirmed by the inhabitants of the country not to equal one-half of that number. The Samar is the most ancient schism from the religion of God, dating from the separation of Rehoboam from Jeroboam. They pretend to a pure Hebrew descent, and reject every passage in the scriptures tending to controvert this belief. The following extracts from *Der Orient*, a German newspaper, afford some indication of the feeling of the continental Jews in relation to S.:—"We have a country, the inheritance of our fathers, finer, more fruitful, better situated for commerce, than many of the most celebrated portions of the globe. Enveloped by the deep-delled Taurus, the lively shores of the Euphrates, the lofty steppes of Arabia, and of rocky Sinai, our country extends along the shores of the Mediterranean, crowned by the towering cedars of Lebanon, the source of a hundred rivelets and brooks, which spread fruitfulness over shady dales, and confer wealth on the contented inhabitants. A glorious land! situate at the farthest extremity of the sea which connects three quarters of the globe, over which the Phœnicians, our brethren, sent their numerous fleets to the shores of Albion, and the rich coasts of Lithuania, near to both the Red sea and the Persian gulf; the perpetual courses of the trade of the world, on the way from Persia and India to the Caspian and Black sea; the central country of the commerce between the east and west. Every country has its peculiarity; every people their own nature: S., with its extensive surrounding plains unfavourable to regular cultivation, is a land of transit, of communication, of caravans. No people of the earth have lived so true to their calling from the first as we have done. We are a trading people, born for the country where little food is necessary, and this is furnished by nature almost spontaneously to the temperate inhabitants, but not for the heavy soils of the colder north. In no country of the earth are our brethren so numerous as in S.; in none do they live in as dense masses, so independent of the surrounding inhabitants; in none do they persevere so steadfastly in their faith in the promise of the fathers, as on the beautiful shores of the Orontes. In Damascus alone live near 60,000. The Arab has maintained his language and his original country; on the Nile, in the deserts, as far as Sinai, and beyond Jordan, he feeds his flocks. In the elevated plains of Asia Minor the Turkoman has conquered for himself a second country, the birth-place of the Osman; but S. and Palestine are depopulated. For centuries the battle-field between the sons of Altai and of the Arabian wilderness, the inhabitants of the West and the half-nomadic Persians, none have been able to establish themselves and maintain their nationality; no nation can claim the name of Syrian. A chaotic mixture of all tribes and tongues, remnants of migrations from north and south, they disturb one another in the possession of the glorious land where our fathers for so many centuries emptied the cup of joy and woe, where every clod is drenched with the blood of our heroes when their bodies were buried under the ruins of Jerusalem. The power of our enemies is gone, the angel of discord has long since mown down their mighty hosts, and yet ye do not bestir yourselves, people of Jehovah! What hinders! Nothing but your own supineness. Think you, that Mehemet Ali or the sultan in Stamboul will not be convinced that it would be better for him to be the protector of a peaceful and wealthy people, than with infinite loss of men and money to contend against the ever-repeated, mutually provoked insurrections of the Turks and Arabs, of whom neither the one nor the other are able to give prosperity to the country?" Colonel Chesney estimates the Jewish pop. in S. at only 12,000, of whom 5,000 are at Jerusalem, 4,000 at Aleppo, and 1,500 at Safet.

The topography of S. is given in detail under the heads of its several pashalics, and that of JERUSALEM and PALESTINE.

SYRIAM, or SYRIAN, an island of Burmah, in the prov. of Pegu, and delta of the Irrawady, formed by the Rangoon and Appo rivers. Near its N side is a

village of the same name, on the S. bank of the Appo, and 24 m. E. of Rangoon. It has a port and a fine temple.

SYRMIA. See SZEREM.

SYROSAKI, a town of Japan, in the island of Nifon, and prov. of Mikava, on the Pacific. It contains about 200 houses.

SYROVATKA (NĬJNĬ), a town of Russia in Europe, in the gov. and 54 m. NW of Kharkov, and district of Soumy.

SYRTIS (GULF OF). See CACES and SIDRA (GULFS OF).

SY-SLVO, a commune of Belgium, in the prov. of W. Flanders, and dep. of Ruddervoorde. Pop. 580.

SYSOLA, a river of Russia in Europe, which has its source in the N. part of the gov. of Viatka, about 45 m. SW of Kai; runs thence into the gov. of Vologda; passes Oust-Sysolsk, and soon after throws itself into the Vithegda, on the l. bank, and after a course in a generally NW direction of about 210 m. Its principal affluents are the Kajima and Lopia on the r., and the Teherkaia and Vizenga on the l. bank. Corn, iron, and anchors are its chief articles of transit.

SYSELLE, a department and commune of Belgium, in the prov. of West Flanders, and arrond. of Bruges. Pop. of dep., 1,709. The village is 4 m. E. of Bruges. Pop. 492.

SYSTON, a parish in Leicestershire, 5½ m. NNE of Leicester, watered by a branch of the Wreak, and crossed by the Midland Counties railway, which has a station here, distant from Loughborough 7½ m. The village, which is of considerable extent, is neat and clean. Area 1,380 acres. Pop. in 1831, 1,349; in 1851, 1,669.—Also a parish in Lincolnshire, 4 m. N by E of Grantham. Area 1,613 acres. Pop. in 1831, 203; in 1851, 325.

SYTRUNJEE, a river of Hindostan, in the prov. of Gujerat, which has its source in the Paraitra mountains, in the N. part of the district of Babriavar, and after a course in a generally E. direction of about 240 m., throws itself into the gulf of Cambay.

SYUDGAUM, a village of Sind, about 5 m. from the E. bank of the Indus, and 30 m. N of Hyderabad.

SYUDGOTE, a village of the Punjab, on the N. bank of the Rayee, and 60 m. in direct distance above its confluence with the Chinab.

SYUD-KA-GOTE, a village of Sinde, between the Hajamaree and Richel mouths of the Indus, and about 10 m. NE of Bander-Vikkar.

SYUDS-GOTE, a village of Afghanistan, on the road through the Pisheïn valley from Shawl to Candahar, and 16 m. N of the former town.

SYWELL, a parish in Northamptonshire, 4½ m. W of Wellingborough. Area 2,031 acres. Pop. 218.

SYZRAN, a district and town of Russia in Europe, in the gov. of Simbirsk. Pop. of district 12,048. The town is 84 m. S of Simbirsk, on a rising ground, between a river of the same name and the Krymza, affluents of the Volga. Pop. 7,000. It has ten churches and a convent.

SZ. For Slavonian names commencing with Sz, not found amongst the following, see SCH.

SZABACZ, or CZABATZ, a fortress of Turkey in Europe, in Servia, in the sanj. and 60 m. WNW of Semendria, at the confluence of the Kamenitza with the Save. It was taken by the Austrians in 1788.

SZABAD. See KIRALY.

SZABADHEGY, a village of Hungary, in the comitat and 2 m. SE of Raab, and extending to the suburbs of that town. Pop. 1,650.

SZABADSZAILLAS, a village of Hungary, in Little Kumania, 11 m. NE of Sol, in a marshy locality on the Csintava. Pop. 3,865.



**SZABATKA.** See THERESIENSTADT.

**SZABOLCS**, or **SZABOLTSCH**, a *gespanschaft* or comitat of Hungary, in the circle beyond the Theiss, extending between 47° 14' and 48° 27' N lat., and between 20° 51' and 22° 21' E long.; and bounded on the N by the comitat of Zemplin; by those of Ungvár and Beregh on the NE; by the comitat of Szathmar on the E; by those of Bihar and Bekes, and by Great Kumania on the SW; and on the W by the comitats of Heves and Borsod. It comprises a total area of 115 German sq. m. Pop. in 1837, 209,153, chiefly Hungarians. It consists of a vast sandy plain, containing extensive marshes, especially in the N and NW, and is bathed by the Theiss, which runs along its N frontier. The climate is mild, and the soil tolerably fertile, producing considerable quantities of grain, especially rye, fruit, wine, and tobacco. It pastures large numbers of cattle and pigs, and has important soda and salt-petre works.—This comitat is divided into 4 marches, and contains 16 towns and 131 villages. Nagy-Kallo is its chief place.

**SZADA** (ERDÖD). See ERDÖD-SZADO.

**SZADEK**, a town of Poland, in the gov. of Warsaw, obwod and 14 m. NE of Sieradz. Pop. 725.

**SZADEKE** (EL), a fine well in the desert of Arabia Petraea, on the road from Syria to Akaba, and about 20 m. SSE of the ruins of Petra. On an adjacent hill are the ruins of an ancient town.

**SZADELLO**, or **SADELLO**, a village of Hungary, in the comitat and 3 m. NW of Torna. A little to the NW is a curious grotto.

**SZAFYE**, a river of Arabia, which descends from the mountains of Akaba; runs NW; and after a course of about 75 m., throws itself into the Dead sea, at its S extremity. Near its mouth is Szafye-Ghor, the ancient *Zoar*, which, in winter, is the resort of numerous Bedouin tribes.

**SZAKIE**, or **SKAKI**, a town of Poland, in the woiwodie of Augustowo, obwod and 33 m. NNW of Marianopol, in the midst of forests, on the Cezarka. Pop. 1,982.

**SZAKOLCZA.** See SKALITZ.

**SZALAD**, **ZALAD**, **SZALA**, **ZALA** - **VARMEGYE**, or **SALAD**, a *gespanschaft* or comitat of Hungary, in the circle beyond the Danube, extending between 46° 18' and 47° 5' N lat., and between 16° 17' and 18° 1' E long., and bounded on the NE by the comitat of Veszprim; on the SE by that of Schimegh, from which it is partly separated by Lake Balaton; on the S by the Drave, by which it is separated from Civil Croatia; on the W by the duchy of Styria; and on the NW by the comitat of Eisenburg. It comprises an area of 834 sq. m. Pop. in 1839, 379,800, chiefly Hungarians. It has a generally undulating surface, and is studded with woods, of the latter of which the chief are the Badalson and Bakonyer-wald. Its principal rivers are the Drave and its affluent the Muhr, and the Szala, which flows into Lake Balaton. It contains several mineral springs. Corn and wine form its chief agricultural productions. Cattle and pigs are extensively reared on its pastures. This comitat is divided into 6 marches, and contains 25 towns and 541 villages. Szala-Egersbeg is its chief town.

**SZALA-EGERSBEG.** See EGRERSBEG (SZALA).

**SZALANKEMENT** (SZTARI), **SZLANKAMENT**, or **SLANKAMENT**, a village of military Slavonia, in the regimentary district, and 23 m. ESE of Peterwarden, on the r. bank of the Danube, opposite the confluence of the Theiss. It is noted for the engagements which took place in its vicinity in 1691 and 1716, between the Austrians and Turks.

**SZALASY**, a village of Poland, in the woiwodie of Sandomir and obwod of Opoczno.

**SZALATHA**, or **SZALATI**, a mountain of the Carpathian chain, on the confines of Transylvania and Wallachia, in N lat. 45° 30', E long. 23° 37'. It contains a gold mine.

**SZALATNA** (GROSS), **NAGY-SZALATNA**, or **WELKA-SLATINA**, a town of Hungary, in the comitat of Sohl, 7 m. ENE of Alt-Sohl, on the r. bank of the Szlatina, at the confluence of the Ocsówka.

**SZALKA.** See SALKEIR.

**SZALKA** (MATE), a town of Hungary, in the comitat of Szathmar, 12 m. S of Nameny, near the l. bank of the Kraszna, in a marshy locality.

**SZALK-SAINT-MARTON.** See MARTON (SZALK-SANKT).

**SZALOK** (NAGY). See SCHLAGENDORF.

**SZALONTA** (NAGY), a fortified town of Hungary, in the comitat of Bihar, 23 m. SW of Gross-Wardein, in a marshy locality.

**SZALT**, or **ES-SZLT**, a town of Turkey in Asia, in Syria, in the pash. and 105 m. SSW of Damascus, and sanj. of El-Belka, near the l. bank of an affluent of the Shaib, on the slope of a singular ridge or tongue of land projecting into a deep valley crowned with a castle, and surrounded on all sides by steep mountains. The castle, which forms the residence of the ten principal sheiks in the environs, was almost entirely re-built by the famous Daher-El-Omar, and is defended by a deep ditch garnished with several old cannon, and supplied with water from a fine spring situated in the centre of the town, and approachable by means of a subterranean passage. The town contains several shops held by the agents of merchants in Nazareth, Damascus, Naplous, and Jerusalem; their trade consists chiefly in clothing, furniture, wheat, and barley, for which they receive from the Bedouins, for the market at Jerusalem, large quantities of raisins and sumach collected in the adjacent mountains. Agriculture and the manufacture of linen form the chief objects of local industry. Its inhabitants consist of about 300 Mussulman and 200 Greek families. The first are divided into three tribes, each of whom occupy a separate quarter. At a little distance from the town, in a place called Mezar-Osha, is a tomb, reputed as that of the prophet Hosea, and equally venerated by the Turks and Christians. On the outside of the building which encloses the tomb is a deep cistern frequented by the Bedouins. Thence the view extends down the valley of the Shaib to its junction with that of the Jordan. The inhabitants of S. pay a small tribute to the powerful tribe of the Beni-Szaker Bedouins, but have hitherto maintained their independence against the pasha of Damascus.

**SZAMOBOR**, a town of Military Croatia, in the generalat and 24 m. NNE of Carlstadt, at the foot of a mountain, on a small affluent of the Save. It has a castle, a Catholic church, and a Franciscan convent. In the environs are mines of iron and copper, containing native salt, and blue and green vitriol, and several gypsum quarries.

**SZAMOS**, or **SAMOSCH**, a river of Austria, formed by the junction of the Great and Little Szamos, which have their sources in Transylvania, and unite in the comitat of inner Szolnok, 9 m. N of Szamos-Ujvar and Armerierstadt. It runs first NW, and then SW to the S confines of the district of Kovar, and forms for a short distance a line of separation between the comitats of Doboka and Middle Szolnok. Soon after it turns abruptly N, and proceeds in that direction till it enters Hungary, when it again bends NW, in which it traverses the comitat and town of Szathmar, and after an extremely sinuous course of about 24 m., flows into the Theiss on the l. bank, 2 m. ENE of Olesva. Its principal affluents are the Szilagy, Lapos, and Kraszna.

**SZAMOS** (Kis), or **KLEINE-SAMOSCH**, a river of Transylvania, formed in the comitat of Klausenburg, 2 m. S of Gyalu, by the junction of the Hev-Szamos or Varne-Samosch, Hideg-Szamos or Kalte-Samosch, the first of which has its source in Mount Kumunczel, in the Hungarian comitat of Bihar, and a course in a generally ENE direction of 39 m.; and the second, which, descending from the mountains on the confines of the comitat of Weissenburg, has a course in a NNE direction of 36 m. The Kis-Szamos flows first ENE, past Gyalu and Klausenburg; turns afterwards NNE; traverses the comitat of Doboka; and penetrating that of inner Szolnok, joins the Nagy Szamos on the l. bank, and after a total course of about 54 m., and thence takes the name of Szamos.

**SZAMOS (Nagy)**, or **GROSS-SAMOSCH**, a river of Transylvania, which has its source in the Radnar mountains, on the confines of Galicia; runs SW through the district of Bisztritz; enters the Hungarian territory; receives the Bistrizza on the l.; and after a course of 84 m., joins the Kis Szamos on the r. bank, 3 m. E of Dees.

**SZAMOS-UJVAR**. See **ARMENIERSTADT**.  
**SZAMOTULY**. See **SAMTER**.

**SZANTO**, or **SANTOW**, a town of Hungary, in the comitat of Abauj, 4 m. NW of Tallya, near the N bank of a long, narrow lake, formed by the Kacsonta, at the foot of the Tokaj mountains. It has two churches, a Catholic and a Reformed.

**SZANY**, a town of Hungary, in the comitat and 37 m. SE of Oedenburg, in a marshy locality. Pop. 1,930.

**SZARHEGY**, a village of Transylvania, in the Szeklers territory, 4 m. NW of Gyergo-St.-Miklos, in a valley, at the foot of Mount Szarmenhegy, on a small affluent of the Maros. It has several mineral springs.

**SZARVAS**, or **SARVAS**, a town of Hungary, in the comitat and 31 m. WNW of Bekes, on the l. bank of the Koros, in a marshy locality. Pop. 14,126. It has a Lutheran church and school, an economical institute, and a school of industry. Cattle are extensively reared in the environs.

**SZARVKO**. See **HORNSTEIN**.

**SZASZ**, or **SAGY**, formerly **NEMET-PELSOCZ**, a town of Hungary, in the comitat of Sohl, 7 m. NNE of Karpfen, in a valley, on the Neresnicza.

**SZASZ (BEREGH)**. See **BEREGHSZASZ**.

**SZASZKA**, **NEMETH-SZASZKA**, **DEUTSCH-SASSTA**, or **BERGWERK-SASSTA**, a town of Hungary, in the comitat of Krassova, 14 m. SSW of Deutsch-Orawicza, in a plain, on a small affluent of the Nera. Pop., chiefly Germans and Wallachians, 2,826. In the vicinity are mines of copper, lead, and iron, and several foundries.

**SZASZ-KEZD**. See **KEISD**.

**SZASZVAROS**, **BROOS**, **SACHENSTADT**, or **ORESTYE**, a town of Austria, in Transylvania, capital of the stuhl, or administrative prov. of the same name, in the Saxon territory, 21 m. SW of Mühlenbach, and 47 m. W of Hermanstadt, on the l. bank of a small affluent of the Maros. Pop., partly Hungarians and partly Germans, 3,500. It is well-built, and has a large castle, three churches, a Catholic, a Lutheran, and a Reformed, and a gymnasium. The culture of the vine, corn, and fruit, forms the chief object of local industry. The place has rather the German than the Magyar type, and the houses in the market-place remind one of those old-fashioned country towns in Bavaria and on the Rhine, plastered and painted in various colours, with here and there a queer gable, but there is more material comfort and prosperity here than there. The Germans of S. are not Saxons, but a colony from the Lower Rhine, speaking a strange dialect that reminds one

of Dutch or broad Scotch, and is quite incomprehensible to the people of Vienna, but to this day quite well understood by the people of Düsseldorf and Nymmegen. Szasvaros, the German name of which is Broos, was one of the first of those settled by the colonists from the Rhine, the order of them being as follows: Mediasch, 1,142; Mühlenbach, 1,150; Hermanstadt, the capital, 1,161; Klausenburg, 1,178; Scheursburg, 1,179; Reussmark, 1,198; Broos, 1,200. To these were subsequently added two others—Cronstadt, 1,208, and Bistriz, 1,206. The two last settlements were probably from Saxony; hence the circumstance of the whole of the colonists receiving the name of Saxons. The greater part of Transylvania was at that time depopulated by war, and these Saxons received from various kings charters and letters patent constituting them a separate community, governed by their own comes or landgrave, according to the laws made by their own national legislature. The stuhl is bounded on the NE by the comitat of Lower Weissenburg, and on the S, W, and NW by that of Hunyad. It is 21 m. in length from ESE to WNW, and 15 m. in breadth, and comprises an area of 66 sq. m. It is covered with mountains, and is watered by numerous streams, affluents of the Maros, which forms the N and NW boundary of the prov. Grain, hemp, flax, legumes, tobacco, and wine are its chief agricultural productions. The forests, which are of considerable extent, abound with game, and the rivers with fish. The pasturage is good, and iron in small quantities is found in some localities. Pop. in 1837, 23,220. The prov. contains one town and 15 villages.

**SZATHMAR**, or **SATHMAR**, a gespenschaft or comitat and town of Hungary, in the circle beyond the Theiss. The comitat lies between 47° 22' and 48° 9' N lat., and between 22° 4' and 23° 52' E long., and is bounded on the N by the comitats of Beragh and Ugots; on the E by that of Marmaros; on the S by Transylvania; on the SW by the comitat of Bihar; and on the W by that of Szabolcs. It is 81 m. in length from E to W, and 66 m. in breadth, and comprises an area of 882 sq. m. Pop., chiefly Hungarians and Wallachians, in 1837, 248,444. With the exception of some mountains in its E part, it is generally flat and marshy. Its principal rivers are the Kraszna, Theiss, and Szamos. The soil, although in some parts sandy, and in others damp, is nevertheless productive in corn, maize, hemp, flax, tobacco, chestnuts, wine, and fruit. It has large herds of horned cattle, sheep, and pigs, and contains mines of gold, silver, antimony, salt, and soda, and numerous forges and glass-works. The comitat is divided into four marches, and contains 19 towns and 245 villages.—The town is 11 m. N of Erdod, on the Szamos. It consists of two parts, united in 1715, viz., Nemethi, on the r. bank of the river; and Szathmar, on an island to the S of the former. The latter is surrounded by walls, and is well-defended. Pop. 11,636, of whom 1,332 are Catholics, 1,794 united Greeks, and 8,526 Calvinists. Pop., inclusive of the suburbs, 14,300. S. contains a cathedral, a Catholic gymnasium, two churches, a Reformed and a United Greek, a Franciscan convent, and a theological seminary. It has manufactories of linen, leather, pottery, and casks, and carries on an active trade in wine and fruit. In the vicinity are several salt mines. S. sustained several sieges during the Hungarian wars of the 14th, 16th, and 17th centuries. A national council was here held by the Protestants in 1646.

**SZAVA-VIZE**. See **SAVE**.

**SZAWLE**, or **SCHAVEL**, a district and town of Russia in Europe, in the gov. and 14 m. of Wilna. Pop. 2,000.



**SZCZEBRZYN**, a town of Poland, in the gov. and 44 m. SSE of Lublin, and obwod of Zamosc, on the l. bank of the Wieprz. Pop. 3,560.

**SZCZEKOCINY**, a town of Poland, in the gov. and obwod of Kielce, on the Pilica. Pop. 1,830.

**SZCZEPANOW**, a town of Austria, in Galicia, in the circle and 11 m. ENE of Bochnia, in a marshy locality.

**SZCZERCOW**, or **SZCEROZOW**, a town of Poland, in the gov. of Kalisch, obwod and 27 m. SE of Sieradz, on the r. bank of the Widawka. Pop. 800.

**SZCZERZEC**, a town of Austria, in Galicia, in the circle and 18 m. SSW of Lemberg, in a fine plain, on the Szczerzka, a small affluent of the Oniester. Pop. 1,431, of whom 599 are Jews.

**SZCZUCZIN**, a town of Poland, in the gov. and obwod and 36 m. SW of Augustowo, on the Wys, a small affluent of the Bobra. Pop. 2,008. It is well-built, and has a large market-place, two churches, a Piarist college, and a convent.

**SZCZUROWA**, a town of Galicia, in the circle and 14 m. NE of Bochnia, in the midst of a marsh.

**SZCZUROWICE**, a town of Galicia, in the circle and 30 m. NNE of Zloczow, in a marshy locality, near the l. bank of the Sty.

**SZE**, a district and town of China, in the prov. of Ho-nan, div. and 24 m. N of Kae-fung-fu, on a small river, in N lat. 36° 25', and E long. 114° 32'.

**SZEBEKLEB**, **SZERELLER**, **KLIER**, or **SERECHLEBY**, a town of Hungary, in the comitat of Honth, 15 m. SSE of Schennitz, on a small affluent of the Lipek.

**SZEBEN** (**NAGY**). See **HERMANSTADT**.

**SZE-CHANG-HEEN**, a district and town of China, in the prov. of Sze-chuen, and div. of Ning-yuen-fu.

**SZE-CHING-FU**, a division and town of China, in the prov. of Kwan-se. The div. comprises 3 districts. The town is in a mountainous locality, near the source of two small rivers, which run under its walls, 72 m. N of Sze-gan-fu, in N lat. 24° 20' 48", and E long. 108° 16' 50'.

**SZE-CHU**, a district and town of China, in the prov. of Chih-le, and div. of Kwang-ping-fu.—Also a district and town in the prov. of Gan-hwuy, and div. of Fung-yang-fu, in N lat. 33° 8', and E long. 118° 20'.—Also a division and town in the prov. of Sze-chuen. The div. comprises 4 districts. The town is 30 m. ENE of Mei-hu, at the confluence of the Yang-keang with the Kin-cha-keang.

**SZE-CHUEN**, **SZ-CHUEN**, or **SSE-TCHOUEN**, the westernmost and largest of the provinces of China, stretching from the parallel of 25° 57' to 33° N, and from 6° 50' to 15° 43' W long. of Pekin. It is bounded on the N by the prov. of Shen-se; on the E by those of Hu-nan and Hu-pih; on the S by Yun-nan and Kwei-chu; and on the W by the Kokonor territory. Its area is estimated at 166,800 sq. m.; its pop. at 21,500,000. Its surface is highly diversified with plains, mountains, and deserts. The Sin-ling and the Yun-ling chains are its chief mountain-ranges. The Yang-tse-kiang, which intersects it in a NE course, receives the entire tribute of all its streams. Its chief tributaries in the prov., are the Yalung, the Min, and the Kialing. Among its productions are silk, tea, sugar, oranges, millet, rice, tobacco, and rhubarb. It is administratively divided into 11 departments. Its capital is Ching-tu-fu, on the Min, in N lat. 30° 40', W long. of Pekin 12° 18'. The half-subdued tribes on the W frontier of this prov. give much trouble to the government by their frequent insurrections and excesses.

**SZE-CHU-FU**, a division and town of China, in the prov. of Kwei-chu. The div. comprises 2 districts. The town is 36 m. SE of Shih-tsen-fu, on a river of the same name, in N lat. 27° 10' 48", and

E long. 108° 34' 30'. It is ill-built, consisting of little more than an irregular assemblage of huts of mud and brick. It is exposed to frequent incursions by the independent tribes who inhabit the adjacent mountains. Cinnabar and mercury are found in the vicinity.

**SZECSENY**, **SPECHEN**, or **SECANY**, a town of Hungary, in the comitat of Neograd, 19 m. SSW of Lutschetz, on a small affluent of the Ipoly. Pop. 3,253, of whom 634 are Jews. It was formerly fortified, and the residence of a Turkish pasha.

**SZECSENY-KOWACSI**, a village of Hungary, in the comitat of Neograd, 12 m. SSE of Kekko, on the r. bank of the Ipoly.

**SZECSISZIGET**. See **SZIGET** (**SZECSI**).

**SZE-GAN**, a district and town of China, in the prov. of Kwan-se, and div. of King-yuen-fu, in N lat. 24° 48', and E long. 107° 58'.

**SZE-GAN-FU**, a division and town of China, in the prov. of Kwan-se. The div. comprises 5 districts. The town is 51 m. NNW of Nan-ning-fu, in a mountainous locality, in N lat. 23° 25' 12", and E long. 107° 53' 50'.

**SZE-GAN-HEEN**, a district and town of China, in the prov. of Yun-nan, and div. of Tung-chuen-fu.

**SZEGEDIN**, **SEGEDIN**, or **SEGEDYN**, a free royal town of Hungary, and one of the capitals of the gsp. or comitat of Csongrad, 59 m. W of Arad, in the midst of a marsh, on the r. bank of the Theiss, which is here crossed by a ferry, and a little below the confluence of the Maros. Pop. 32,209. It is well-fortified and well-built, and has six suburbs, an ancient, several Catholic, Reformed, and Greek churches, a Franciscan, and a Dominican convent, a Piarist college, a Catholic gymnasium, a philosophical institute, a high-school, a national theatre, a salt magazine, a house-of-correction, and several hospitals. A recent writer describes S. as "a rough, homespun, busy, prosperous, money-making place, like a town on the Ohio, a place of mills and boats, grain warehouses, and general stores,—not an ultimate emporium that stands in contact with the luxurious consumer, but the initial market that takes its tone from the laborious producer." The principal part of the town is situated on the r. bank of the Theiss, and is called Old S., while New S. is on the other side of the river. The fortress which commands the passage of the river, as the ramparts rise from its banks, is an old Turkish fortress, built in a square form, with round towers at the corners. On the opposite side of the river, and connected with the town by a bridge of boats, is New S., which was almost entirely burnt down in consequence of a terrific explosion of a powder magazine that took place during the late insurrectionary war. All around the fort is the civil part of the *palanka* or central town, which is inhabited by the merchants and tradespeople. It exhibits great inequality of architecture, some of the houses being large, lofty, and modern in the style of Vienna, while side by side stands here and there an old Hungarian house of one story that perhaps stood there when there was a Turkish pasha in the fortress. The lower town, or Alsó Varos, is mostly inhabited by land-cultivators, and is composed of long streets with the houses considerably apart, each having a kitchen-garden, and being mingled with ponds and marshes, is neither town nor country. A portion of the pop. of the lower town are ship-builders and millwrights; for here the best and cheapest boats in Hungary are built as well as the best floating-mills. These floating-mills are a peculiarity of the river, there being no less than 300 of them on the Theiss; for small water-power being scarce, from the flatness of the country, the only power sufficient for turning a

mill is on the large streams. The Felső Varos, or upper town, is not much higher than the lower town; the position with reference to the flow of the Theiss being the only difference, for the one is as boggy as the other. The houses here are not so good as those of the palanka, but considerably better than those of the lower town. The principal manufacture of the upper town is soap-boiling, there being above twenty of these establishments here in which common soap is made, much of which is exported to Pest and Vienna, the low places in the sandy plains between this and Ketskemet abounding in soda. The upper town is also the residence of the principal boat-owners, and some of them are so extensively engaged in navigation and transport as to possess 50 or 60 boats, worth each when new about £400. Comorn and S. are in pacific times the two towns in Hungary which are the seats of the river shipping-interest, as well for building as for ownership. The principal freights upwards are corn and rapeseed from the Banat, and tallow brought down the Maros from Transylvania, which along with the soda on the spot enables the soap-manufacture to thrive. The returns from above are the cottons of Bohemia, the cloths of Moravia, and coarse fancy articles from Vienna. Considerable quantities of wood and wine also come from Tokay and the Upper Theiss. The produce of the Maros is floated down the Theiss to the Francis canal, which leads into the Danube, thus saving a considerable detour by the confluence; it is then dragged up to Raab and Wieselburg, which latter town is the great granary of Vienna. "I inquired," says the correspondent of the *Times*, "whether the railway from S. to Pest, offering so much more direct a transit, was not taken advantage of, but found that the trouble of unloading and loading again was an insurmountable obstacle. The Save, lying in the direction of the Adriatic, has also a considerable share in the Szegedin boat-freights, but as there are sometimes delays of months for want of water, and as the merchant can never foretell when his produce can arrive in Fiume or Trieste, the traffic by this important artery is long down far below what it might be. The unanimous wish, therefore, of these provinces, so rich in produce, is two railways—one up the valley of the Save, and another complete to Pest and Vienna, i. e., from here to Czegled, and from Waitze to Presburg. The fitting complement of such an improvement is the adoption of the free-trade system for the whole empire." This town, which is of great antiquity, owes its name to the Turks, and in the reign of Mathias Corvin was one of the most important in Hungary. The plain which lies to the NW was the scene of a battle on the 20th Oct. 1686.

**SZEGENY-SZEREDA.** See **SZEREDA**.

**SZE-HWUY**, a district and town of China, in the prov. of Kwang-tung, and div. of Chaou-hing-fu, in N lat. 23° 22', and E long. 112° 30'.

**SZEK**, **SZIKAKNA**, **SECKEN**, or **SZIK**, a town of Transylvania, capital of the comitat of Doboka, 6 m. SSW of Armenierstadt, on a height. In the vicinity are extensive salt-mines.

**SZEK (BABA).** See **BABINAGREDA**.

**SZEK (BATA)**, **BATASZEK**, or **BATASZEG**, a town of Hungary, in the comitat and 17 m. SSW of Tollna, on the slope of a hill, near the r. bank of the Sarviz.

**SZEKAKNA.** See **SZEK**.

**SZEKOSO**, or **SEKCSO**, a river of Hungary, in the comitat of Saros, which descends from the E side of Mount Csorgo; runs first SE, then S, and afterwards SW, passing in its course Kapi, Also-Sebes, Eperies, and Sovar; and throws itself into the

Tarcsa, on the l. bank, 14 m. S of Eperies. It has a course of about 18 m.

**SZEKELYHID**, **SZEKELYVAROS**, or **ZICKELHID**, a town of Hungary, in the comitat of Bihar, 24 m. NNE of Gross-Wardein, in a marshy locality. It has two churches, a Catholic and a Reformed, and formerly possessed a fortress.

**SZEKELY-KERESZTUR.** See **KREUTZ**.

**SZEKELY-UDVARHELY.** See **UDVARHELY (SZEKELY)**.

**SZEKELY-VASARHELY.** See **NEUMARKT**.

**SZEKEREMB**, a village of Transylvania, in the comitat of Hunyad, 25 m. W of Mühlenbach, in a deep valley, on an affluent of the Maros. It has two churches, a Catholic and a Greek. In the vicinity are valuable gold mines.

**SZEKES-FEJERVAR.** See **SZUHLEWISSENRE**.

**SZEKLER-LAND**, country of the Szeklers, one of the three great divisions of Transylvania, of which it occupies the E part. See article **TRANSYLVANIA**.

**SZEKLERBURG.** See **CSIK-SZEREDA**.

**SZEKLERMARKT.** See **VASARHELY**.

**SZEKSZARD**, or **SEXARD**, a town of Hungary, in the comitat and 8 m. SW of Tolna, near the r. bank of the Sarviz. Pop. 8,150. It has two churches, a Catholic and a Reformed, and a Catholic school, and carries on an active trade in wine.

**SZE-LE**, a district and town of China, in the prov. of Hu-nan, and div. of Fung-chu.

**SZELEH.** See **BERGU**.

**SZELESKUT**, **BREITENBRUNN**, or **PRAHPRON**, a town of Hungary, in the comitat of Oedenburg, 24 m. SW of Presburg, on the N bank of Lake Neusiedl. Pop. 1,183.

**SZELNICZE**, **SYELNICA**, or **SYLNICA**, a town of Hungary, in the comitat of Lyptau, 6 m. NW of St. Miklos, on a small affluent of the Vag. It has a saltpetre manufactory.

**SZELNIDEK.** See **STOLTZENBURG**.

**SZE-LUNG-CHU**, a district and town of China, in the prov. of Kwan-se, and div. of Sze-ching-fu, in N lat. 21° 56', and E long. 106° 50', on a small river, 18 m. SSW of Sze-ming.

**SZELYSTIE**, or **SZELISTYE**, **GROSSDORF**, or **LANGENDORF**, a village of Transylvania, in the district and 15 m. W of Hermannstadt, on a height. Its chief production is cheese.

**SZEMERE (REPCZE)**, a town of Hungary, in the comitat and 26 m. SE of Oedenburg, near the l. bank of the Repcze.

**SZE-MING-FU**, a division and town of China, in the prov. of Kwan-se. The div. comprises 4 districts. The town is in a mountainous locality, on a fine river, near the frontier of the Annam empire, and 27 m. SSW of Tai-ping-fu.

**SZE-MOW-TING**, a district and town of China, in the prov. of Yun-nan, and div. of Tsin-nuh-fu.

**SZEMPCZ**, **SZENCZ**, or **WARTBERG**, a town of Hungary, in the comitat and 15 m. ENE of Presburg, near the Schwarzwasser.

**SZE-NAN-FU**, a division and town of China, in the prov. of Kwei-chu. The div. comprises 3 districts. The town is in N lat. 27° 56' 53", and E long. 108° 25' 40", on the l. bank of the Wei-keang, 38 m. NNE of Shih-tseen-fu. It lies in a fine plain, enclosed by mountains, and presents an assemblage of ill-built mud and brick dwellings. It is exposed to the incursions of the independent tribes who inhabit the adjacent mountains.

**SZENDRO**, or **St. Andre**, a town of Hungary, in the comitat of Borsod, 15 m. SSW of Torna, on the l. bank of the Bodva. It has two churches, a Catholic and a Reformed, a Franciscan convent, and sulphureous baths.



**SZENITZ**, *SEICA*, or *SZENASLALU*, a town of Hungary, in the comitat of Neutra, 18 m. SE of SkalitZ, on the Verbocsa. Pop. 2,467, of whom 830 are Jews. It has manufactories of cloth. Hemp is cultivated in the environs.

**SZENT**, a Hungarian adjective synonymous with *Saint*. Names, of which it is a prefix, not found amongst the following are to be sought for under their own initial.

**SZENTA**, or *ZENTA*, a town of Hungary, in the comitat of Bacs, 10 m. S of Kiskanisza, near the r. bank of the Theiss. It has two churches, a Catholic and a Greek. Pop. 13,263. It is noted for a victory gained by Prince Eugene in 1696.

**SZENT-DOMOKOS** (*CSIK*), a village of Transylvania, in the Zekler's country, 15 m. SE of Gyervo-St.-Miklos, i. e. a deep valley, on the l. bank of the Aluta. In the vicinity is a rich copper-mine.

**SZENTES**, a town of Hungary, in the comitat and 7 m. SE of Csongrad, in the midst of a marsh, on Lake Kentva, at the embouchure of the Kurcza. Pop. 17,559. It has three churches. Wine is cultivated in the environs.

**SZENT-GEORGY**. See *GEORGEN-SANKT*.

**SZENT-ISTVAN**. See *PANDOUR*.

**SZENT-KERCSZT**. See *HEILIGEN-KREUTZ*.

**SZENT-MARTON**. See *MARTINSBERG*.

**SZENT-ROSALIA**, or *ROSALIENBERG*, a mountain on the confines of the Hungarian comitat of Oedenburg, and the Austrian circle of the Lower Weinerwald. On its summit is a small chapel.

**SZENY**. See *ZENG*.

**SZEOCZE**, or *SEOCZ*, a village of military Slavonia, in the regimentary district of Gradiska, 12 m. SSW of Posega. Gypsum is extensively wrought in the environs.

**SZEPESVARALLYA**. See *KIRCHDRAUF*.

**SZEPSI**. See *MOLDAU*.

**SZERDAHELY**, a town of Hungary, in the comitat and 27 m. SE of Presburg, in the island of the Danube named Csalló-köz.

**SZERDAHELY** (*MURA*), or *SZERDISCHE*, a town of Hungary, in the comitat of Szalad, 16 m. NNE of Warasdin, on the r. bank of the Muhr.

**SZERDAHELY**. See *REISSMARKT*.

**SZERED**, a town of Hungary, in the comitat and 32 m. ENE of Presburg, near the r. bank of the Waag. Pop. 2,600. It has a castle belonging to the princes of Esterházy, a Catholic church, a synagogue, and a custom-house. It has an active entrepot trade in salt and wood.

**SZEREDA**, a town of Transylvania, in the Szekler's country, 24 m. N of Schäßburg, partly on the slope, and partly at the foot of a mountain, on the r. bank of the Nyarad.

**SZEREDNYE**, or *SEREDNE*, a town of Hungary, in the comitat and 12 m. SE of Ungvár, near the l. bank of a small affluent of the Sztara. It has a castle, and carries on an active trade in wine.

**SZEREM-ARMEGYE**, *SYRMIA*, or *SRIMZKA-ARMEGJA*, a comitat or administrative province of Hungary, in civil Slavonia, extending between 44° 50' and 45° 29' N lat., and between 18° 38' and 20° 10' E long., and bounded on the N by the comitat of Verocz and Bacs, from which it is separated by the Danube; on the E and S by the regimentary district of Peterwardein, and on the SW by that of Brod. It is 72 m. in length from NW to SE, and 15 m. in medium breadth, and comprises a total area of 360 sq. m. Pop. in 1837, 124,711. It is traversed by a chain of hills, which here form the line of separation between the basins of the Danube and Save. The soil, except in the mountains of Karlowicz and Fruska-gora, and in the wastes of Klisser, is very fertile, and produces corn, maize, and wine of excellent quality. Cattle and pigs are

reared in great numbers in its pastures. In its NW part is a large pond, and in the SE several marshes now partly drained by the Jarszin canal. The mountains of Fruska-gora contain important coal-mines. This comitat contains 7 towns and 80 villages. Its capital is Bukovar.

**SZERENES**, a town of Hungary, in the comitat and 38 m. SW of Zemplin, near the r. bank of the Kacsinta. It has a castle now in ruins, two churches, a United Greek and a Reformed, and a sulphureous spring. The environs are noted for their wine.

**SZE-SHWUY**, a district and town of China, in the prov. of Shan-tung, div. and 30 m. ENE of Yen-chu-fu, in N lat. 35° 48', and E long. 117° 30'.—Also a district and town in the prov. of Ho-nan, and div. of Kae-fung-fu.

**SZESZUPPE**, or *SCHESCHUPPE*, a river which has its source in the NE of Poland, to the N of Suwalki; runs first NE, then N, and afterwards NW; forms for some distance the line of separation between Poland and Prussia; enters the prov. of El. Prussia, in the regency of Gumbinnen; and, after a total course of 165 m. joins the Niemen, on the l. bank, 7 m. ENE of Ragnit. Its principal affluent is the Shirwind, which it receives on the l. Kalvary, Ludwinowo, Marienpol, Pilwiszki, Neustadt, and Schirwind are the only places of importance on its banks, which especially in the upper and middle part of the course of this river, are generally marshy.

**SZE-TSUNG-HEEN**, a district and town of China, in the prov. of Yun-nan, and div. of Kwan-se-chu.

**SZEVERIN**, a village of civil Croatia, in the comitat of Agria, 21 m. WSW of Carlstadt, and near the r. bank of the Kulpa. It has a fortress.

**SZE-YANG**, a district and town of China, in the prov. of Sze-chuen, and div. of Sze-chu.

**SZE-YANG-HEEN**, a district and town of China, in the p. ov. of Shan-tung, and div. of Yen-chu-fu.

**SZEZEKOCINY**. See *SCIEKOCINY*.

**SZIBIN**. See *HERMANSTADT*.

**SZIEDLISCZE**, a town of Poland, in the wojwodie and 29 m. ESE of Lublin, and obwod of Kra-nistan, in the mts. of w. d. Pop. 201.

**SZIGET**, *OLEVENY*, or *EÖTEVENY*, a village of Hungary, in the comitat and 7 m. NE of Raab, on the r. bank of a branch of the Danube, opposite the island of Csalló-köz. Pop. 2,552, of whom 340 are Jews.

**SZIGET** (*SZECSI*), a town of Hungary, in the comitat of Szalad, 21 m. NNE of Warasdin, on the r. bank of the Kerka. Pop. 270.

**SZIGET** (*UJ*). See *SZIGETVAR*.

**SZIGETH**, *SIGET*, *SYHOT*, *SYHOLY*, or *HOSZUMEZO-SZIGETH*, a town of Hungary, capital of the comitat of Marmaros, 69 m. SW of Kolomea, between the r. bank of the Itza and the l. bank of the Theiss, and a little above the confluence of these rivers. Pop. 6,000. It has three churches, a Catholic, a United Greek, and a Reformed, a synagogue, a Piarist college, and two gymnasia. It has an active trade in salt, the produce of the locality.

**SZIGETVAR**, or *UJSZIGET*, a town of Hungary, in the comitat of Schimegh, 23 m. S of Kaposvar, in the midst of a marsh, on the r. bank of the Almas. It is well-fortified, and has a castle on the opposite side of the river, two suburbs, two Catholic churches, one of which was formerly a mosque, a Greek church, and a Franciscan convent. Pop. chiefly Magyars, Germans, and Rascians, 3,000. This town is noted for the defence and heroic death of Count Nicolas Zrini in 1566.

**SZIKSZO**, *SIKTZ*, or *SYKSAWA*, a town of Hungary, in the comitat of Abaujvar, 10 m. NE of Miskolcz, on the Barsonyos. It has two churches, a

Catholic and a Reformed. Pop. 3,889. The vine is cultivated in the environs.

**SZILAGY-CSEH**, **SZILAGY-CSEH**, or **CSEHU**, a village of Transylvania, in the comitat of Middle Szolnok, 19 m. NE of Somlyó, on the l. bank of the Szilagy an affluent of the Szamos. Pop. 3,615.

**SZILL**, a town of Hungary, in the comitat and 33 m. SE of Oedenburg, in a marshy plain. Pop. 1,560.

**SZINNA**, or **SZINA**, a town of Hungary, in the comitat of Zemplin, 20 m. NE of Mihály, on the Cziroka, at the foot of the Carpathians.

**SZINYERVARALLYA**, or **SZINYIR-VARALLYA**, a town of Hungary, in the comitat and 20 m. ESE of Szathmar, on the Szynier, a small affluent of the Szamos, in a mountainous and woody locality. Pop. 2,836. It has a castle, now in ruins, and manufactories of pottery. Wine is cultivated in the vicinity.

**SZIRACS**, **SCHIRACS**, **SZIRACH**, or **SIRACS**, a town of civil Slavonia, in the comitat and 26 m. NW of Posega, on the r. bank of the Biela. It has a Greek church, and cavalry barracks. Silk is cultivated in the environs.

**SZISZEK** (ALT), **ALT SISSEK**, **SISSECK**, or **SZTARY-SZISZEK**, a village of Hungary, in Civil Croatia, in the comitat and 31 m. SE of Agram, on the l. bank of the Kulpa, a little above its confluence with the Save. Pop. 802. It carries on an active trade in grain, and has building docks. This town, the *Sissia* of the ancients, has an old fortress, and contains numerous Roman antiquities. A little to the SW, on the other side of the Kulpa, and on a peninsula formed by that river, is the village of New Sziszek, which depends upon military Croatia, and the 2d Banat regiment of the Ban of Croatia.

**SZITNA**, or **SYTNO**, a mountain of Hungary, in the comitat of Honth, 4 m. SSW of Schemnitz. It is surmounted with a fortress, now in ruins, and has a slate quarry.

**SZKACSAN**, or **SKACANY**, a town of Hungary, in the comitat of Neutra, 13 m. SW of Bajmocz, on the Nitricska.

**SZLATINA**, **SLATINA**, or **SOLCLATINA**, a village of Hungary, in the comitat of Marmaros, 2 m. NW of Szigeth, on the r. bank of the Theiss. In the vicinity are mines of copper and salt.

**SZLECS**, **HAROM-SZLECS**, **SLAJC**, or **TRI-SLJACE**, a town of Hungary, in the comitat of Liptau, 4 m. ESE of Rosenburg, on a small affluent of the Vag. It consists of three detached parts, distinguished as Also-Szlecs, Fels-Szlecs, and Kozep-Szlecs. It has a saline spring.

**SZLICHTINKOWO**. See **SCHLICHTINGHEIM**.

**SZLUIN**, or **SLUIN**, a town of military Croatia, capital of a regimentary district of the same name, in the generalat and 27 m. S of Carlstadt, on the l. bank of the Korana, at the foot of mountains. It has a quarantine house. The district comprises an area of 219 sq. m. Pop. 45,000.

**SZMERDUCHETEPLICZE**, a bathing establishment in Civil Croatia, in the comitat of Warasdin, in a narrow valley, 5 m. SSW of Krapina, near the l. bank of the Kosztelina. It derives its name, signifying 'Stinking wells,' from the unpleasant odour exhaled by the thermal springs.

**SZOBOSZLO**, a town of Hungary, in the district of Haiduckes, 13 m. SW of Debretzin, on the Koszely. Pop. 13,844.

**SZOBOTA**. See **OISNITZ**.

**SZOBOTICZA**, a village of civil Croatia, in the comitat and 15 m. NE of Kreutz, on a height. In the environs are several coal-mines.

**SZOBOTIST**, or **SOBOTISTE**, a town of Hungary, in the comitat of Neutra, 12 m. SE of Skalitz, on

the Verbaczka. Pop. 3,000. It has important manufactories of cloth, pottery, and cutlery.

**SZOBRANCE**, or **SOBRANEC**, a town of Hungary, in the comitat and 10 m. NNW of Unghvar, on the Hornysianka. It has a Catholic church and sulphureous baths.

**SZOKO**, or **JOKAL**, a town of Turkey in Europe, in Servia, in the sanj, and 84 m. WSW of Semendria.

**SZOKOLACZ**, a town of Turkey in Europe, in Bosnia, in the sanj, and 69 m. W of Banja-Louka, on the frontiers of Croatia.

**SZOLLOS** (GARAM). See **GARAM-SZOLLOS** (RIBNICK).

**SZOLLOS** (GROSS), or **NAGY-SZOLLOS**, a town of Hungary, capital of the comitat of Ugots, 28 m. SE of Munkacs, and near the r. bank of Theiss. Pop. 2,144. It has a united Greek, a Reformed, and Catholic churches, a Franciscan convent, and a synagogue.

**SZOLNA**, **ZSOLNA**, **SILLEIN**, or **ZILINA**, a town of Hungary, in the comitat of Trentschen, 10 m. ENE of Predmir, between the l. bank of the Waag, and the r. of the Zsilinceza, and a little above the confluence of these rivers. It is enclosed by walls, and has five gates, several Catholic churches, a Franciscan convent, and a gymnasium. It has a brewery and an active trade in wine.

**SZOLNOK**, or **SOLNOK**, a town of Hungary, in the comitat and 32 m. SSW of Heves, in the midst of a marsh, on the r. bank of the Theiss, which here receives the Pest canal, and a little below the confluence of the Zagyva. Pop. 12,000, nearly all Magyars. It has a castle, now in ruins, and a Franciscan convent. A recent visitor of this town says, "S. being a place of 12,000 inhabitants, on the Theiss, the second navigable river of Hungary, and at the terminus of the railway that connects Pest with the Theiss, one might suppose it to have some appearance of a town; but it looks exactly like a large Turkish village in Bulgaria, minus the bazaar. The ground about S., as well as all along the Theiss from Tokay to its confluence with the Danube, near Belgrade, is fat black *humus*, and consequently not good for potatoes, but excellent for rapeseed and wheat, the proportion of rape sown to the product being around S. as 1 to 90, 95 and 100. With more hands and better agriculture the vale of the Theiss might become a Peruvian gold mine; for instance, from here to Mezö Tör is a five hours' journey, all black alluvial soil, and only two houses are to be seen."

**SZOLNOK** (MITTEL), or **KOSZEP-SZOLNOK**, a comitat of Transylvania, in the NW part of the Hungarian territory, bounded on the W and N by Hungary; on the E by the district of Kovar and comitat of Inner Szolnok; on the SE by the comitat of Doboka; and on the S by that of Kraszna. It is 51 m. in length from E to W, and 21 m. in medium breadth, comprising an area of 294 sq. m. Pop. in 1837, 122,680. It is covered with woody mountains, and is watered by the Szamos, and its affluent the Szilagy, and the Kraszna. It produces in small quantities grain and wine; but the woods and rearing of cattle form the chief objects of local industry. The comitat comprises 2 towns and 144 villages. Its capital is Zilah.

**SZOLNOK-INNER**, or **BELSO-SZOLNOK**, a comitat of Transylvania, in the N part of the Hungary district, bounded on the N by Hungary; on the E by the Saxon territory; on the S by the comitat of Doboka; on the W by that of Middle Szolnok; and on the NW by the district of Kovar, from which it is separated by the Szamos. It is 60 m. in length from E to W, and 51 m. in breadth, comprising an area of 516 sq. m., and contained in 1837, 85,363



inhabitants, it is generally hilly. Its principal rivers are the Szamos and its head-streams, the Great and Little Szamos, the Nistritz, an affluent of the former, and the Lapos. It produces grain, and in small quantities wine, but the rearing of cattle forms the chief occupation of the inhabitants. Its forests abound with game, and in the mountains are mines of gold, silver, iron, and salt. This comitat is divided into two circles, distinguished as the Upper and Lower, and contains three towns and 191 villages. Its cap. is Dees.

**SZOMOLYAN**, **SMOLENITZ**, or **SMOLENICE**, a town of Hungary, in the comitat and 31 m. NE of Presburg, at the foot of the Carpathian mountains. It has a Catholic church and synagogue. Wine is cultivated in the environs.

**SZONY**, a town of Hungary, in the comitat and 3 m. SE of Komorn, on the r. bank of the Danube. Pop. 1,550.

**SZOZUTON**, a town of Galicia, in the circle of Słeczow. It has two churches, a Catholic and a United Greek.

**SZRENIAWA**, or **SEREMINA**, a river of Poland, in the woiwodie of Krakow. It has its source in the obwod of Olkusz, a little to the E of Wolbrom; flows thence into that of Miechow; passes Slomniki, Proszowice, and Koszyce, and a little below the latter town joins the Vistula, on the l. bank, and after a course in a generally SE direction of about 54 m.

**SZRENSK**, a town of Poland, in the woiwodie and 39 m. NNE of Plock, and obwod of Mlawka, in the midst of a marsh, on the r. bank of the Mlawka. Pop. 885, of whom 200 are Jews.

**SZTARA**, or **STARA**, a town of Hungary, in the comitat of Zemplin, 8 m. NNW of Mihaly, near the l. bank of the Laborca, on a small affluent of that river.

**SZTRANYAN**, or **STRANANYA**, a village of Hungary, in the comitat and 20 m. NW of Ungvár, on the l. bank of the Laboroz, by which it is separated from Mihaly. Silk is cultivated in the environs.

**SZTROPKO**, or **STROPKOW**, a town of Hungary, in the comitat of Zemplin, 19 m. ESE of Eperies, on the l. bank of the Ondava, by which it is separated from the comitat of Saros.

**SZURDOK-KAPOLNAK**, a village of Transylvania, in the district of Kövár, 10 m. SSE of Nagybanya, on a height, near the r. bank of a small affluent of the Lapos. It has several mineral springs.

**SZUSSICZA**, or **PONTESZUSSICZE**, a village of Civil Croatia, in the comitat of Agram, 2 m. E of Ravna-gora, on a small river of the same name, an affluent of the Dobra.

**SZUTINSZKA**, a hamlet of Civil Croatia, in the comitat and 23 m. SW of Warasdin, on a small river of the same name, an affluent of the Krapina. In its vicinity is a thermal spring.

**SZUY-CHANG**, a district and town of China, in the prov. of Keang-se, and div. of Kew-keang-fu.—Also a district and town in the prov. of Che-keang, and div. of Chu-chu-fu, in N lat. 28° 35', E long. 119° 18'.

**SZUY-CHU**, a district and town of China, in the prov. of Ho-nan and div. of Kwei-chu-fu, in N lat. 34° 28', E long. 115° 13'.—Also a district and town in the prov. of Hu-pih and div. of Tih-gan-fu, 105 m. NW of Wu-chang-fu, in N lat. 30° 46', E long. 113° 15' 12'.

**SZUY-CHU-FU**, a division and town of China, in the prov. of Keang-se. The div. comprises three districts. The town is 45 m. SW of Nan-chang-fu, in N lat. 28° 24' 40", E long. 115° 17' 36". It is situated in a fertile locality, on an affluent of the Kan-keang, by which it is divided into two parts, each enclosed by a wall. Of these divisions, that distinguished as the North is inhabited by mandarins; the other or south part is occupied by the common people. *Lapis lazuli* is found in the surrounding mountains.

**SZUY-DING-CHING**, a town of Tchungaria, between the rivers Talki and Tankharlyk, and 21 m. NW of Kouldja.

**SZUY-GAN**, a district and town of China, in the prov. of Che-keang, div. and 15 m. SE of Wan-chu-fu, on the sea of Corea, on which it has a small port, in N lat. 27° 47', E long. 120° 45'.

**SZUY-GAN-HEEN**, a district and town of China, in the prov. of Che-keang and div. of Yen-chu-fu, in N lat. 29° 26', E long. 118° 50'.

**SZUY-KE**, a district and town of China, in the prov. of Kwang-tung, div. and 39 m. N of Luy-chu-fu, on a peninsula of that name, in N lat. 21° 19' 12", E long. 109° 46'.

**SZUY-NING**, a district and town of China, in the prov. of Keang-nan, and div. of Sen-chu-fu, in N lat. 33° 52', and E long. 118° 10'.

**SZUY-NING-HEEN**, a district and town of China, in the prov. of Sze-chuen and div. of Tung-chu-en-fu, in N lat. 30° 32', E long. 105° 36'.—Also a district and town in the prov. of Hu-nan, and div. of Tsin-chu, in N lat. 26° 25', E long. 109° 49'.

**SZUY-PING**, a district and town of China, in the prov. of Honan, and div. of Jou-ning-fu, in N lat. 33° 8', and E long. 111° 42'.

**SZUY-TIH-CHU**, a division and town of China, in the prov. of Sze-se. The div. comprises 3 districts. The town is 270 m. NNE of Se-gan-fu, in N lat. 37° 38', and E long. 110° 3'.

**SZUY-TING-FU**, or **TA-CHU**, a division and town of China, in the prov. of Sze-chuen. The div. comprises three districts. The town is 225 m. ENE of Ching-tu-fu, in N lat. 31° 18', E long. 107° 37'.

**SZUY-YUEN-HEEN**, a district and town of China, in the prov. of Kwei-chu and div. of Tsun-e-fu.

**SZVIDNIK** (Also), or **DOLNJ-SWIDNIK**, a town of Hungary, in the comitat of Saros, 28 m. NE of Eperies, at the confluence of the Ondava and Hun-kovecz.

**SZYDLOW**, a town of Poland, in the woiwodie of Krakow, obwod and 12 m. NNE of Stobnica. Pop. 995.

**SZYDLOWIEC**, a town of Poland, in the woiwodie of Sandomir, obwod and 29 m. ESE of Opoczno. Pop. 1,500.

END OF VOLUME SIXTH.

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